



CENTRAL INSTITUTE OF MINING & FUEL RESEARCH
(CSIR, Ministry of Science & Technology, Govt. of India)
H.Q.: Barwa Road Campus, Dhanbad – 826 015 (Jharkhand), India

NIT No.CIMFR/PUR/14(3)2009

Date:27.11.2009

NOTICE INVITING TENDER

Director, CIMFR invites sealed tenders (In two Bid Systems) for supply, installation and commissioning of the following stores..

SI No.	Particulars of stores	Qty.
1.	Supply, Erection, Installation, Commissioning and successful demonstration of Water Treatment Plant for Mine Water Treatment and making suitable for drinking purpose at Pootakee – Balihari Area (BCCL) in Jharia Coalfield, Dhanbad on Turn Key Basis.	01 unit

Last Date of Submission : 21.12.2009 Time: Up to 4 P.M.

Date of Opening : 22.12.2009 Time: 11.00 AM

Details of the Tender Document is available at www.cimfr.nic.in

1 : 0326- 2388306/2388319

6 : 0326- 2296030/2381210

Stores & Purchase Officer



CENTRAL INSTITUTE OF MINING & FUEL RESEARCH
(CSIR, Ministry of Science & Technology, Govt. of India)
H.Q.: Barwa Road Campus, Dhanbad – 826 015 (Jharkhand), India

NIT No.CIMFR/PUR/14(3)2009

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Director, CIMFR invites sealed tenders (In two Bid Systems) for supply, installation and commissioning of the following stores..

Item No.	File No.	Particulars of Item	Qty.	T.D. Fee in DD*	EMD in DD/BG/BC
1.	CIMFR/PUR-14(5)2009	Supply, Erection, Installation, Commissioning and successful demonstration of Water Treatment Plant for Mine Water Treatment and making suitable for drinking purpose at Pootakee – Balihari Area (BCCL) in Jharia Coalfield, Dhanbad on Turn Key Basis.	01 unit	Rs.300.00	Rs.6,00,000.00

* No tender fees are required in case it is downloaded from the site www.cimfr.nic.in.

Note: The Tender Document can be obtained from the Office of the Stores & Purchase Officer, CIMFR, Barwa Road, Dhanbad on written request on payment of the non- refundable and non – transferable tender document fees as stated above in the form of cross Demand Draft issued by a scheduled bank drawn in favour Director, CIMFR, payable at State Bank of India, Hirapur Branch, Dhanbad from **30.11.2009** to **21.12.2009**. CIMFR will not be responsible for non- receipt of the Tender Documents due to postal delay/loss in transit. The tender complete in all respect along with EMD should reach to this office on or before **21.12.2009** at **4.00 PM** and will be opened on **22.12.2009** after **11 AM** onwards in the Meeting Room of CIMFR.

Bidders may contact Dr. Abhay Kr. Singh, Sct./Project Leader, CIMFR, Barwa Road Campus, Dhanbad through Mobile No.: 9470509014 / 9835324263 or E-mail: singhak@yahoo.com for technical as well as commercial clarifications, if any, before submission of offer.

Tender Documents with detail terms & conditions can be downloaded from our website: www.cimfr.nic.in . Tender fees will not be required if it is downloaded from the website up to the tender sale period. The required EMD as stated above in the form of DD or BG must be enclosed in the Technical Bid failing which the offer will be treated as non-responsive.

Director, CIMFR reserve the right to accept or reject in part or in full to any or all the tender without assigning any reason thereof.

' : 0326- 2388306/2388319
6: 0326- 2296030/2381210

s/d
Stores & Purchase Officer
For Director

CENTRAL INSTITUTE OF MINING AND FUEL RESEARCH
(An ISO 9001 Institute)
(Council of Scientific & Industrial Research)
H.Q: Barwa Road, Dhanbad-826015,Jharkhand , India

GLOBAL NOTICE INVITING TENDER
(SHORT NOTICE)

NIT NO.CIMFR/PUR/14(3)2009

Date:27.11.2009

Sealed tenders, in two parts (**Part A-** Technical & Commercial and EMD, **Part B-** Price, in separate sealed covers) in duplicate, are invited for design, supply, construction, commissioning and successful demonstration of a ***Mine Water Treatment Plant at Pootakee- Balihari Area (BCCL) in Jharia Coalfield, Dhanbad*** on Turn Key Basis, complete with accessories, instrumentation and data acquisition system from established, reliable, technically & financially sound manufacturer or suppliers who have successfully manufactured/fabricated, installed and commissioned one similar type plant as a complete package for any Govt./Semi-Govt. /Public or reputed organizations. R & D organization with sufficient experience of Water Treatment Plant & also having the above experience may also apply.

The interested parties are requested to obtain the Tender paper on payment of Rs. 300.00 (Non-refundable) in the form of demand draft drawn in favour of Director, CIMFR, payable at SBI, Hirapur branch, Dhanbad, India towards the cost of tender papers from purchase section either on request or in person or through Air mail/courier. These rates are exclusive of postage/courier charges etc. The tender paper may be obtained before 4 PM on 21.12.2009 and the completed tenders must be submitted by 4 PM on 21.12.2009 along with EMD of Rs.6,00,000.00 (Rupees Six Lakhs) or Bank Guarantee for the same amount valid for six months and sealed with **Part A**. The part A of the tender will be opened on 22.12.2009 at 11 AM onwards . Late Tender will not be accepted. The global NIT may also be referred to our web site : www.cimfr.nic.in

Director, CIMFR reserves the right to accept or reject any tender without assigning any reason.

Director

CENTRAL INSTITUTE OF MINING AND FUEL RESEARCH
(An ISO 9001 Institute)
(Council of Scientific & Industrial Research)
H.Q : Barwa Road , DHANBAD-826015,Jharkhand,India

GLOBAL NOTICE INVITING TENDER

NIT NO.CIMFR/PUR/14(3)2009

Date:27.11.2009

Sealed tenders, in two parts (**Part A-** Technical & Commercial and EMD, **Part B-** Price, in separate sealed covers) in duplicate, are invited for design, supply, construction, commissioning and successful demonstration of a ***Mine Water Treatment Plant at Pootakee- Balihari Area (BCCL) in Jharia Coalfield, Dhanbad*** on Turn Key Basis, complete with accessories, instrumentation and data acquisition system from established, reliable, technically & financially sound manufacturer or suppliers who have successfully manufactured/fabricated, installed and commissioned one similar type plant as a complete package for any Govt./Semi-Govt. /Public or reputed organizations. R & D organization with sufficient experience of Water Treatment Plant & also having the above experience may also apply.

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Site/Location: Purchase Section,CIMFR, HQ premises, Barwa Road, Dhanbad-826015

Time of completion: Eight (8) months

Last date of issue of tender: Before 4 PM on 21.12.2009

Last date of receipt of tender duly completed in all respects at CIMFR, HQ, Barwa Road, Dhanbad upto 4 PM on 21.12.2009.

Part A of tender will be opened in presence of bidders or the duly authorized representatives who may wish to be present at CIMFR on **22.12.2009 at 11.A.M.**

Complete specification and details of individual terms & conditions are available in the tender documents.

Tender documents (Non-transferable) can be obtained from the office of Sr. Stores & purchase officer, CIMFR, Barwa Road, Dist. Dhanbad – 826015 during any working days between 11 A.M and 4 P.M.

Issue of the tender documents does not mean that the parties are considered qualified. After opening of Part A of the offer, the same will be scrutinized for the eligibility, qualification.

Earnest money Rs.6,00,000.00 (Rupees Six Lakhs) as A/C payee demand draft drawn in favour of Director, CIMFR payable at State Bank of India, Hirapur, Dhanbad, code no. 1670 or Bank Guarantee for the same amount valid for six month should accompany the tender sealed in Part A. Tender received without earnest money will be invalid. The Earnest money will be liable to be forfeited, if the tenderer withdraws or amends, impairs or derogates from the tender in any

respect within the period of validity of his tender. Part-B- Price part of those tenderer who are considered to be fully competent to do the work shall be opened only after fulfilling Technical & commercial criteria evaluated by a competent authority. The Earnest money of all unsuccessful tenderers will be returned as early as possible after the expiration of the bid-validity but not later than 30 days of the award of contract.

Canvassing in any form in connection with the tender is prohibited and the tenders submitted by the contractor who resort to canvassing are liable for rejection.

The tenderer shall quote price both in figure and words.

The prospective tenderer should inspect the site to fully acquaint himself about the site conditions and attendant facility, provisions etc. necessary for satisfactory execution of installation and commissioning. The purchaser in any circumstances shall entertain no claim whatsoever on any such ground, at any subsequent stage.

Earnest money will be forfeited if the manufacturer fails to commence the work as per letter of award.

Except writing price, the tenderer should not write any conditions or make any changes, additions, alterations and modifications in the printed form of tenders. Tenderers who are desirous to offer rebate the same should be brought out separately in the covering letter and submitted along with the tender.

Tender shall remain valid for a period of ninety (90) days from the date of submission of the tenders, during this period the tenderer shall not withdraw his offer. Sealed tenders shall be submitted in double sealed covers superscribed with the name of the unit, date & time of opening on both the inner and outer envelopes. They will be received up to 4.00 P.M on 21.12.2009 and Part A will be opened at 11.00 AM on 22.12.2009 in the purchase section of CIMFR, Dhanbad. Tenders should be dropped in the tender box kept in the office of Stores & Purchase officer, CIMFR on or before the aforesaid closing date and time. In case these are sent by post these should be sent by Registered post/Speed post /Air mail addressed to CIMFR, Dhanbad. Tenderers are to ensure that they post the tender well in advance so as to reach before the closing time and date. No tender will be accepted after the closing date and time. The global NIT may also be referred to our web site www.cimfr.nic.in

CIMFR does not bind itself to accept the lowest tender and reserves the right to accept or reject any or all tenders received either in full or part thereof or to split the work among more than one vendor, if necessary, without assigning any reason whatsoever.

Director
Central Institute of Mining and Fuel Research,
H.Q : Barwa Road– Dhanbad 826015,India

CONDITIONS OF TENDERER

PREPARATION OF TENDERS

Before submission of tender the Tenderers are requested to make themselves fully conversant with the conditions of Tendering General Conditions, Special Condition, Site Conditions, Specifications, flow diagrams and all other relevant information so that no ambiguity may arise in these respects subsequent to the submission of the tender.

It shall be the responsibility of the Tenderer to request for any missing document. In absence of any such request the Tenderer will be deemed to have received and read all documents.

The Tenderer shall submit his tender strictly in accordance with the tender specification and the terms & conditions laid down in the tender document.

SUBMISSION OF TENDER

Tender to be submitted in two copies.

Tenders to be in two parts, unless otherwise instructed to the contractors, all tenders shall be submitted in two parts i.e.

(i) Part A: Technical and Commercial & EMD **(ii) Part B:** Price

List of documents to be submitted in Part A

- ◆ Tendere's covering letter
- ◆ Signed NIT tender document in the first copy of tender.
- ◆ GA drawing of plant & equipment along with broad specifications.
- ◆ Full statement regarding the status and past experience of the tenderer. Documentary evidence regarding the satisfactory completion of work and their values are to be submitted.
- ◆ List of Man power & construction equipment/ workshop/manufacturing /testing facilities & resource available for this contract along with their present conditions/location.
- ◆ Income Tax and Sales Tax Clearance Certificates (Latest).
- ◆ Bankers certificate regarding the financial capability of the tenderer/solvency certificate from their bank.
- ◆ Other document as may be required to be submitted along with the tender.
- ◆ All tender papers shall be signed and returned with the first copy of the tender under part A
- ◆ A/C payee demand draft or Bank Guarantee of Rs.6.0 lakhs as EMD.

List of documents to be submitted in Part B

- ◆ Tenderer's covering letter.
- ◆ NIT document to be signed and returned
- ◆ Price should be quoted both in figure & in words.

Note: All documents of tender papers, drawings and documents shall be initialed at the lower right hand corner with ink only and signed where required by the tenderer or any person holding power of Attorney authorising him to sign on behalf of tenderer. All signatures shall be dated.

Number of Copies of Tender

The tender shall be submitted in two (2) copies each self-contained and complete in all respects except that NIT document to be signed & returned only with the first copy & confirmation regarding enclosure to be made in other copies.

Tenders to be Unambiguous

No alteration in the form of the tender or in the form of special stipulation will be permitted. If corrections are needed while filling in the tender, the same shall be made by the Tenderer with his signature. Tender which is incomplete, obscure or irregular or only for a part of the package/ schedule is liable to rejection.

Tenderer's Identity

The tender shall contain the name, residence and place of business of person or persons submitting the tender.

Authorization

In the event of the tender being submitted by a firm, it must be signed by each partner thereof, and in the event of the absence of any partner, it shall be signed on his behalf by a person holding a Power of Attorney authorizing him to do so, certified copy of which shall be enclosed.

Tenders submitted on behalf of companies registered under the Indian Companies Act, for the time being in force, shall be signed by the persons duly authorized to submit the tender on behalf of the company and shall be accompanied by certified copies of the resolutions, extracts of articles of association, special or general Power of Attorney and the other information to show clearly the title authority and designation of persons signing the tender on behalf of the company.

Delivery of Tender

The completed tender in at least two (2) copies with all its enclosures shall be submitted.

All the two copies of Part A: Technical and Commercial inscribing Tender Notice number, name of work for which tender is submitted, name of tender along with Part A: Technical and

Commercial & EMD with due date of opening

All the two copies of Part B: Price & EMD, shall be enclosed in a separate securely sealed envelope which shall be similarly superscribed but shall have the inscription Part B: Price.

If forwarded by mail, the sealed envelope containing the tender as per clause must be enclosed in another envelope properly addressed to Stores & purchase officer.

Personal delivery is recommended. Tenderers forwarding tenders by mail shall do so at their own risk and tenders received after due date and time will not be entertained. Telegraphic offers will not be entertained.

Qualification of Tenderers

Only such firms need to tender who can produce satisfactory evidence that they have the necessary experience and financial resources and organization to undertake such work as specified in the purchasers tender document.

Notwithstanding any pre-tender check on qualification the purchaser reserves the right to undertake any post-tender evaluation of qualification of Tenderers, as he deems necessary.

AWARD OF CONTRACT

The right to accept a tender and award the contract to one or more than one Tenderer, if considered necessary, rests with the purchaser. It shall not be obligatory on the part of the purchaser to accept the lowest tender. The purchaser could be at liberty to accept any tender, lowest, or otherwise, in whole or in part and to reject any or all the tenders received, without assigning any reason, and no explanation can be demanded of him by any tenderer in respect thereto.

ABNORMAL PRICE

The tenderer is expected to quote price for each item after careful analysis of cost involved for the performance of completed items considering all specifications and Condition of contract. In case it is noticed that price quoted by the tenderer for any item or equipment is unusually high or low, it will be sufficient cause for the rejection of the tender, unless the owner is convinced about the reasonableness, after the scrutiny of the analysis for such price, to be furnished by the tenderer on demand.

Time for Completion

The time of completion is Eight Months

The time shall be reckoned from the 10th day of issue of award letter.

Training

Requisite training for operation and routine maintenance during defect liability period i.e one year after successfully hand over the plant should be provided by the successful Tenderer at CIMFR site free of cost.

AMC

Annual maintenance contracts as applicable after warranty period has to be provided and must be quoted separately as an optional item.

INCOME TAX AND SALES TAX CLEARANCE CERTIFICATES

The Indian tenderer shall furnish with the tender, Income Tax & Sales Tax Clearance Certificates (Latest) from competent authorities. The purchaser reserves the right to reject any tender if Income Tax & Sales Tax clearance certificates are not enclosed.

Entry tax will be paid by the contractor & the same will be reimbursed to the contractor by CIMFR after submission of necessary receipt by contractor.

DRAWINGS

Each tenderers shall forward in connection with this Tender, if any, drawings (a complete set with each copy of the Tender) and the drawings shall be duly marked so as to connect them with the tender to the satisfaction of the purchaser and shall be deposited by the Tenderer with his tender.

All drawings forwarded as part of the tender whether so required by any reference in the specifications or not shall remain the property of the purchaser.

SECURITY

The Tenderer (whether his tender is accepted or not) shall treat the details of the tender specification and other documents attached there to, as private and confidential & should maintained the secrecy of the Tender specification.

COMMERCIAL REQUIREMENTS

Price Schedule

Please quote unit price and corresponding total amount for individual items. The price quoted should also include the following separately:

- ◆ Design, manufacture, testing and supply ex-works.
- ◆ Packing, forwarding & loading at your works.
- ◆ Sales tax, octroi, contract tax or any statutory levies. CIMFR, being an R&D organization is exempted from custom & excise duty. Necessary certificate on demand may be provided.
- ◆ Cost of imported measure items need to be as per the C.I.F. of principles offer.

- ◆ CIMFR is eligible for concession in Sales Tax, as applicable to Research/ Educational Institute for purchase of scientific Equipment/ Instrument.
- ◆ Delivery to CIMFR site- Transportation charges.
- ◆ Entry Tax – If entry tax is to be paid on certain items of the project the tenderer have to pay directly to local sale tax department.
- ◆ Road Permit- The tenderer have to registered with local sale tax department for requirement of road permit for transportation of goods in the state of Jharkhand at CIMFR, Dhanbad.
- ◆ Insurance – The entire material of equipment of the plant should be insured from manufacturing to commissioning.
- ◆ The consignment be dispatched on door-delivery and freight paid basis and unloading and transferring consignments in to equipment/machinery/materials storage shed of the purchaser will be arranged by the Suppliers and not by the purchaser. The price should include or be fully qualified in respect of all items of expenditure, including cost, incidentals to execution of this order. All charges should be shown separately in words and figures.
- ◆ Statutory clearance to be provided by the Agency.
- ◆ LPG cylinder will be supplied by the Agency with the help of CIMFR and number of cylinders to be checked by the Agency and if required cylinder with heating system will be supplied.
- ◆ During erection and commissioning all the consumables including LDO to be supplied by the Agency.
- ◆ Electrical charges at present rate is Rs. -----/unit
- ◆ Accommodation if available at the time of requirement by the supplier may be provided as per prevailing market rate.
- ◆ Any other items relevant to scope of work.

Program

In the event of work being awarded to you, you will submit and update at regular intervals a bar chart program for the raw material procurement, manufacture/fabrication, testing, supply & commissioning of the items covered under scope of work.

Guarantees

The equipment of your supply shall be guaranteed against defects for a period of 24 months from the date of hand over of the plant. Any defects in quality and workmanship of materials noticed during this period have to be rectified/replaced by you at your cost to the entire satisfaction of the purchaser. You have to provide performance and design guarantee where complete design is in your scope. You have also to provide materials test certificates etc. wherever necessary.

You shall guarantee the performance of the equipment, machinery and materials designed and supplied by you as per the parameters suggested in our specification. For establishing the guaranteed performance you will run the equipment for a specified period of time.

SPECIAL ADVICE TO THE TENDERER

The bidder is strongly advised to visit the Plant area personally so as to assess the quantum of work involved. The bidder is also advised to verify the status of the place, Substation, Switch room and the Stores where certain equipment have to be modified or replaced. It is also advised to check up the current labor situation as well as the political scenario prevailing in the area. Any extra claim siting the aforesaid grounds shall not be entertained after the award of the contract.

KEY PARTICULARS OF THE OFFER
(To be filled by the Tenderer)

1. Offer fully complying with the requirements Stipulated in the Technical Specification (TS)?
2. Name and address of Tenderer :
3. Stage wise power requirement for construction and erection work.
4. All the enclosed schedules duly filled up & furnished along with the tender?
5. List of bought out equipment & their source of supply.
6. Drawing furnished?
7. Whether all data/ drawing /documents/ Information furnished along with this Tender as per TS?
8. All tests at manufacture's works shall be carried out in presence of Purchaser/Consultant as per TS?
9. Confirm painting of all equipment shall be done as per TS.
10. Reference lists of similar systems already installed and operating elsewhere.

Seal of Company:

Signature of the Tenderer

Name.....

Designation.....

IMPLEMENTATION CHART
(To be filled up by the Tenderer)

The successful Tenderer shall complete the entire project as per the requirement

S. No.	Activity	Date from LOI (in weeks)
1.	Preparation of Basic & Detailed Engineering drawings, Submission & approval	
2.	Placement of order for bought out items	
3.	Supply of materials to site	
4.	Erection	
5.	Testing & Commissioning	
6.	Performance Guarantee	

Note: The Tenderer shall also submit Bar Chart

Seal of Company:

Signature of the Tenderer

Name.....

Designation

1.1 INTRODUCTION

Central Institute of mining and Fuel Research (CIMFR) a constituent of Council of Scientific & Industrial Research (CSIR) under the Ministry of Science of Technology, Govt. of India, devoted to the research and development towards the Eco-friendly mining and dedicated to the development of modern technology for the country. CIMFR is interested for supply, installation, commissioning and successful demonstration of Water Treatment Plant for mine water treatment for drinking purposes at PB Project site in Jharia Coalfield, Dhanbad on turn key basis. CIMFR has undertaken a Project “**Development of Cost-effective Mine Water Reclamation Technology for Providing Safe Drinking Water**” under XI Five Year Plan in which it is proposed to install a pilot plant for mine water treatment and to make it available to local habitants.

1.2 The intent of this Tender Specification is to furnish the required technical details/design drawings to enable the Tenderer(s) to submit their best offer for supply, erection, testing commissioning & performance guarantee of Coal Mine water Treatment Plant at Pootakee, BCCL in Jharia Coalfield, Dhanbad as per scope of work.

The provision given in these documents shall be complementary to one another. However, in case of any conflict between the provisions made in these documents with regard to Technical Specification, the order of priority amongst various documents shall be as specified below:

- i) Tender Specifications
- ii) GCC
- iii) Invitation to Tender

2.1 SCOPE OF WORK

The scope of work will consists of complete supply, fabrication, installation and commissioning cum demonstration of Water Treatment Plant including its civil structures and site design construction. The basic purpose of the pilot plant is to treat mine water available at the installation site and to provide it to local residents for drinking uses. The treatment process comprises following steps to separate impurities present in coal mine water to make it suitable for the purpose of drinking:

- a) Separation of suspended impurities
- b) Separation of dissolved solids including heavy metals
- c) Removal of microorganisms

The plant envisages production of 3000 liter of treated water per hour on continuous basis.

For this plant a process flow diagram has been developed which has been attached along with a list of necessary equipments with specifications (**Annexure-I**). Detail specification, list of equipments and flow diagram may be found at the CIMFR website (www.cimfr.nic.in).

In the first step suspended impurities will be separated using polyelectrolyte or other chemicals for fast settling. For separating the dissolved salts, a special material (developed by NML, Jamsedpur) will be used. This process will take place at predetermined conditions like pH, temperature etc. These conditions are to be maintained by automation control. The reaction products in the form of suspended particles will be separated in a clarifier and finally through a filter. For removing microorganisms ozone treatment will be carried out. For supplying ozone an ozone generator will be used.

Connectivity of different units with pipelines has been shown in the flow diagram. Flanges are mostly used. Material of construction and pipe sizes are also shown therein.

Mild steel structural materials like channels, angles and other plates are required for supporting most of the equipments. Different units are to be supported at different heights to ensure proper flow of water from one unit to the other. The exact height and location has to be worked out at the time of erection by the successful vendor.

Necessary power for running the plant shall be available. Vendor may make estimate of requirement. Electrification and erection of an appropriate shed for housing the plants and equipments as per the lay out should also included in the offer.

Lightening arrester to be provided and separate pit to be made by the Agency. Sodium vapor lamp at inside and outside and FL lamp in control room to be provided by the Agency.

Earthing pit to be made for whole plant including all the equipment. instrument.

Shock treatment chart to be provided in the plant.

Single point mine water supply by pipe shall be provided at a distance 500 mt. (Approx.) away from the test site. Vendor shall make necessary pump, sump and piping arrangement to transport mine water to the test site.

Training of some personal has to be provided.

2.2 The offered system shall meet all the requirements given in and this should be suitable for the experiments required to be carried out.

2.3 The Tenderer along with the offer shall submit the following documents/drawings/details

i) General

- a) Layout of the proposed units of Coal Mine Water Treatment Plant.
- b) Back up calculations for the sizing of the all equipment, instruments after receiving purchase order.
- c) Manufacturer's catalogues/technical catalogues of all equipment & instruments after receiving purchase order.
- d) Technical Specification of equipment, instruments & auxiliary materials
- e) Bill of material for bricks, mortars, castables, equipment, and auxiliary materials after receiving of purchase order.
- f) Operational Philosophy of the Coal Mine Water Treatment Plant. .
- g) Reference list of earlier supplies for similar equipment.
- h) Implementation Schedule of the Project.

ii) Mechanical

- a) Layout of the proposed Plant.
- b) Broad specification of each equipment

iii) Electrical

- a) The control philosophy of the operation.
- b) SLD of MCC, connected load, maximum demand and average demand of the offered system.
- c) GA of MCC with approx. dimensions (W X D X H) and approximate weight. Tenderer shall submit general arrangement drawing of proposed MCC etc
- d) Technical leaflets containing broad technical specification for Electrical air pre heater & Temperature controller.
- e) Duly filled in technical schedule shall be submitted by the Tenderer along with the offer

iv) Instrumentation

- a) Process & Instrumentation diagram
- b) Schedule of control and instrumentation system with broad technical specifications and data sheets for individual instruments
- c) Schedule, circuit diagram etc

- d) Power supply schemes
2.4 Drawings & Documents for approval of Purchaser:

The Successful Tenderer shall submit in four sets the following drawings and documents for approval of the Purchaser/ Purchaser's consultant:

- i) **Mechanical**
- a) GA drawing of equipment showing plan, elevation, and view and relevant cross-sectional views.
 - b) Detail specification of each equipment along with a copy of referred code/ references.
 - c) Detail specification of each equipment along with indicating therein make, type and rating of all components.
 - d) Operation and control philosophy.
- ii) **Instrumentation**
- a) P & I diagrams, control system architecture diagram equipment specifications.
 - b) Application information, specification sheet and technical data of all equipment and major components.
- iii) **Civil & Structural**
- a) Design, General Arrangement (along with load data for RCC foundations) and other detail working drawings for RCC over head reservoir, RCC mine water storage, equipment foundations and other civil works for the shed, equipment, trenches etc. and all other civil & structural works required for the successful commissioning of the project. Civil & structural work required for the shed is in the scope of the supplier & the GA drawing for the same should be incorporated in the Technical document.
 - b) Brick work will be 3.00 mt height on three sides and required size of rolling shutter side to be made.
 - c) 3D drawing of layout of equipment and instrument to be submitted after receiving the order and before submission of final drawing.
 - d) Building inside & outside illumination as per Industrial practice are to be provided.
- 2.5 The Successful Tenderer shall be responsible for the proper erection of the system along with all accessories as per recommended procedure of manufacturer and approved drawings. The erection work shall be carried out as per modern engineering practice with the help of skilled & experienced workforce. The successful Tenderer shall use his own tools & tackles required & provide sufficient manpower for erection, testing & commissioning of these systems and interconnecting piping.
- 2.6 On completion of erection work, all the systems shall be tested along with the associated equipment for proper performance.
- 2.7 Commissioning spares for critical equipments are to be specified and supplied along with the system by the Tenderer.
- 2.8 The list of insurance spares adequate for this purpose shall be submitted.
- 2.9 The Tenderer shall confirm the supply of all consumables required for erection, testing & successful commissioning of the system. List of consumables, if, any, for the operation and maintenance of the system shall be furnished and shall be quoted separately.
- 2.10 The Tenderer shall furnish a list of fast wearing spares.
- 2.11 List of two years operational spares is to be mentioned by the Tenderer,
- 2.12 The Tenderer shall comply with this specification and "General Conditions of Contract" and "Invitation to tender" given by the Purchaser along with this tender specification.
- 2.13 The building, RCC raw water storage and RCC Over head Reservoir shall be designed and provided as per relevant Indian standard.

2.14 Control –cum office room shall be single storied flat roofed with sides covered with brick masonry inside the main building.

2.15 All brick masonry walls shall be plastered with cement sand mortar (1:6) on both sides. Thickness of plaster shall be minimum 18 mm for external surfaces and 12 mm for internal surfaces of walls. Thickness of plaster for ceiling shall be minimum 6mm. Proportion for RCC work of Over head reservoir and ground water storage will be 1:1.5:3 or M-20 grade including 6 mm thick cement plaster of mix 1:3 (1 cement : 3 fine sand) with asphalt lining.

2.16 All outside plastered surfaces of masonry walls shall be applied with water proofing cement based paint of approved make and quality and to be applied as per manufacturer's specification .Inside surfaces of masonry walls shall be treated with white wash/colour wash or paint of approved quality , make and colour or to be tiled as the case may be , on the basis of technological requirements.230 mm high skirting shall be provided in all rooms except where there is a provision for dado. The finishes to be provided are as follows :

Area	Finish
a) General areas in main building:	Two (2) finishing coats of white wash over a coat of primer.
b) Control cum office room:	Plaster of paris finish & two (2) finishing coats of plastic emulsion paint of approved shade over a coat of primer.

Standard types of doors & windows shall be used. All steel doors shall be of standard design using sections as per IS:1038 and IS:1081 incl. All steel windows shall be of standard design steel windows and fully glazed (4mm) thick conforming to IS: 1038 and IS: 1081. Synthetic enamel paint shall be provided to all doors & windows.

All steel structures & all concrete and reinforced concrete structures shall be designed in accordance with relevant IS code. Painting to steel structures conforms to light corrosive service painting as per the best engineering practice.

Other additives like floor hardening, heat resisting, fire resisting and water proofing components shall be added depending on requirements.

2.17 BATTERY LIMIT

For power supply take over point shall be tapping of power from outgoing terminals of Purchaser's main LT board located at an approx. cable route distance of 50 meters from the proposed Coal Mine water Treatment Plant site.

Lightening arrester to be provided and separate pit to be made by the Agency. Sodium vapor lamp at inside and outside and FL lamp in control room to be provided by the Agency.

Earthing pit to be made for whole plant including all the equipment.instrument.

Shock treatment chart to be provided in the plant.

Single point mine water supply by pipe shall be provided at a distance 500 mt. (Approx.) away from the test site.

2.18 PURCHASER'S OBLIGATION

- i) Water and electricity as required for the project work shall be supplied by the Owner on chargeable basis as per CIMFR rates as follows:
 - a) Water @ 1% of total civil works.
 - b) Electricity at actual
- ii) Pootakee – Balihari Area (BCCL) in Jharia Coalfield, Dhanbad will provide only space within their complex for setting the Coal Mine Water Treatment Plant.
- iii) The Tenderer may indicate any other requirements, which are to be provided by the Purchaser.

3.0 TECHNICAL SPECIFICATION:

SITE CONDITIONS:

The proposed water treatment plant will be installed at PB Project site in Pootakee Balihari Mining area of Jharia Coalfield. The PB Project site is located about 15 km south of Dhanbad. Dhanbad is well connected by train and road with the other part of the country including Kolkata and New Delhi. The nearest International air port is at Kolkata which is at distance of 259m km from Dhanbad.

3.1.1 Climate Conditions

The area lies in the tropical region with fairly wide temperature variations between winter and summer. The climate of the Jharia area is characterised by very mild winters and hot wet summers. In the area, rainfall mostly occurs in the period of monsoon (June to September). Meager rainfall due to conventional thunderstorms occurs in the months of April and May. The rainfall during winter occurs occasionally associated with western disturbances. The maximum temperature of the coalfield rises up to 44°C during May-June while it dips to 5° to 7°C in December-January. The annual rainfall in area and adjacent regions varies from 1000 to 1200 mm.

3.2 BASIC DESIGN : See Annexure –I (Flow Diagram)

3.3 MECHANICAL EQUIPMENT – See List of Equipment in Annexure-I

3.3.2 Equipment Specifications - See List of Equipment in Annexure-I

3.4 UTILITY EQUIPMENT :

3.5.1 Supply of Materials

Inspection & Storage

3.5.2 Equipment Specification. See List of Equipment in Annexure-I

3.5.3 Supply, Inspection & Storage

3.5.3.1 The Successful Tenderer shall carry out inspection at the works of the Manufacturer for all required materials in his scope of supply, receipt at Dhanbad, to cross-check the quality, a second inspection may be carried out by the Purchaser and/or Consultant. The materials shall be finally accepted if the results obtained in the second inspection are in conformity to the specification. During inspection at Manufacturer's premises the Purchaser may at his sole discretion depute his authorize representative (s) to witness inspection.

3.5.3.2 Quality will be checked on the following aspects.

- i) Visual inspection on manufacturing defects.
- ii) Inspection for physical & chemical properties.
- iii) Inspection on damages due to packaging &/ transport.

3.5.3.3 The Tenderer shall do procurement, inspection, supply and safe storage of all refractory materials & all auxiliary materials.

3.6 ELECTRICAL

3.6.1 The scope of work for Electrical will include:

- i) Electrical Air Pre Heater
- ii) Control Panel.
- iii) Motor Control Center
- iv) LT Motors
- v) Local Control Stations
- vi) All LT power and control cables, cable trays, cabling materials & accessories, GI conduits, conduit fittings and materials etc. as required within the battery limits
- vi) Tapping of power, including cables, from outgoing terminals of Purchaser's Main LT board and located at an approx. cable route distance of 50 metres.
- vii) Laying and termination of all cables under the scope.
- viii) Earthing of all electrical equipment & connecting it with existing earth mat.
- ix) The Coal Mine Water Treatment Plant shall be complete in all respects and any device or feature not included in this specification, but are essential for the desired functioning of the equipment, shall be deemed to be within scope of the specification whether specifically mentioned or not.

3.6.2 General Conditions & Design Criteria

3.6.2.1 All equipment shall be designed for smooth efficient and trouble-free operation in tropical humid climate having maximum relative humidity of 100% and maximum ambient temperatures is 50⁰ C. All electrical equipment and accessories fittings etc. shall be standardized to reduce inventory. Ease of operation equipment and facilities.

3.6.2.2 Power Supply

The power supply system available shall be as follows:

415 V:3-phase, 4-wire, 50 Hz: Earthed system, short-circuit level: 50KA for 1s. the above power supply will have a range of variation as follows:

Voltage	± 10 percent
Frequency	± 5 percent

3.6.2.3 Cables

- i) LT power cables shall be 1.1kv grade multicore PVC insulated armoured & PVC sheathed aluminum cables.
- ii) Minimum size of multicore aluminum LT power cables shall be 6 mm².
- iii) Control cables shall be stranded 2.5 sq. mm. Copper
- iv) In general, cables shall be laid in open in cable racks. Concealed conduit wiring shall be adopted depending upon specific requirements of a particular application.

3.6.3 Equipment Specification

3.6.3.1 Squirrel Cage Induction Motors

All the LT Motors shall be Squirrel Cage Induction Motor, suitable for 415 V, 3phase 50Hz A.C shall conform to following standards:

IS:325-1996	Induction motor, performance
IS:4722-1992	Rotating Electrical machine
IS:1231-1974	Dimensions of three phase foot mounted motor
IS:4691-1985	Degree of protection provided by enclosures.
IS:900-1992	Code of practice for installation, maintenance
IS:4029-1967	Guide for testing three phase induction motors.
IS:7816-1975	Guide for testing insulation resistance of rotating machine.
IS:2253-1974	Designations of types of construction and mounting arrangement of rotating electrical machine.
IS:6362-1995	Designation of methods of cooling for rotating electrical machine.
IS:4728-1975	Terminal markings for rotating electrical machinery.

Design basis

- i) The temperature rise of the stator winding shall be restricted within 70°C over the specified ambient of 30°C when measured by resistance method for class-F insulation. The motor nameplate rating shall correspond to the specified ambient temperature of 50°C as well as of 40°C.
- ii) The Motor shall be able to start the driven equipment with rated load capacity and accelerate up to the rated speed satisfactorily under most arduous condition with 80% voltage at the terminal.
- iii) The Motor shall be suitable for DOL (Direct-on-Line) start through contractor/ molded case circuit breakers, Starting current shall not exceed 6 times full load current. The manufacturer shall include necessary and appropriate surge suppresser in the motor terminal box if considered necessary by him or indicate categorically the limitations of the motor.
- iv) The Motor shall be reversible type i.e. rotation in the both clockwise & anti clockwise directions.
- v) The cooling of the Motor shall be self ventilated type, totally enclosed fan cooled (TEFC) with method of cooling IC –o, 141. The cooling fan shall be directly mounted on the shaft (NDE) and shall be suitable for both clockwise and anti clockwise rotation.
- vi) The motor shall be capable to withstand sudden application of 150% of rated voltage for phase difference between incoming voltage and motor residual voltage.

General Constructional & Other Features

- i) **Winding**
 - a) The winding shall be of copper and with class F insulation However, for class F insulation temperature rise shall be limited to 70°C over design ambient temperature of 50°C.
- ii) **Bearing**
 - a) The bearings shall be self-lubricated by grease.
 - b) Grease lubricated bearings shall be pre-lubricated and provided with in service lubrication facility with drain to avoid over lubrication.
 - c) All items like grease nipples etc shall be easily accessible and lubrication shall be possible without removal of guarding.
- iii) **Grounding**
 - a) Each motor frame shall have two distinct grounding pads, one on each side and complete with tapped hole and bolt.
 - b) Main cable terminal box & auxiliary terminal boxes shall have separate grounding pads, tapped holes & bolts.

- c) The size of the earth connection of the motors to the shop earth grid shall be as specified in IS 3043-1987.

iv) Motor Terminal Box

The terminal boxes shall be spacious, dust and water proof with degree of protection same as that of the motor.

Noise Level

The noise level shall be per IS-12065 (1987).

Tests

- a) All Routine tests, as per relevant IS standards shall be carried out on the Motor.
b) Test certificates for all routine tests shall be furnished to the customer in four (4) copies prior to despatch for approval and despatch clearance.

3.6.3.2 Motor Control Center (MCC)

- i) The motor Control Centre (MCC) shall conform to IS 8623 (part-1)- 1993, (part-2)- 1993. The degree of protection shall be IP-52.
- ii) MCC shall cater to all electrical loads Coal combustion Test Rig unit. MCC shall have one incomer. All the incomer and outgoing feeders of the MCC shall be fully fixed type modules. All incomer and motor feeding cubicles of MCC shall have MCCB as circuit breaker. The switchboards shall be of sheet steel, cubicle type, free standing, enclosed, factory built assembly for indoor use. The switchboards shall be designed for 415V, 3-ph, 4-wire 50 Hz power supply system & rated for 1100 V insulation voltage. Separate busbar compartment shall be given at the top for housing the main busbars. Busbars shall be extended to the full length of the compartment. Vertical busbars shall have the rating corresponding to the breakers/switches connected with it.
- iii) Bus bar shall be capable to withstand the fault current of 50 kA for 1 sec and peak short circuit current of 84k Amps. Arrangement and spacing of the busbars shall be made in such a way that it can withstand the fault level as specified. The bushing of bus bar shall be capable to withstand thermo-mechanical shock arising out of heating of busbars during short circuit.
- iv) Control Circuit voltage for MCC modules shall be 240 V AC. MCC shall have its own control. The control transformer shall have fuse & MCB protection on primary side as well as in the secondary side.
- v) All non draw-out modules of MCC shall have adequate nos. of sliding type auxiliary contacts rated for 240 V, 5A, A.C, AC-11 duty.

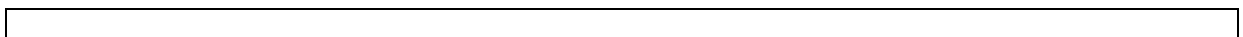
Other Features of MCC:

- i) 20% Spare terminals in the control terminal block shall be provided for future use.
- ii) Earthing terminals 2nos. shall be provided at the two opposite ends of the MCC for connection with external earth connections.
- iii) Identification label of suitable size on lamicoid sheets or anodised aluminium sheets shall be given for the switchboard and for the cubicles.
- iv) Danger boards, electrically insulated rubber mat as required shall be given in the floor in the front of the switchboard.
- v) Base channel for mounting the distribution board as required shall be provided and installed.

3.6.3.3 MCCB

The MCCB used in the MCC shall conform to IS:13947 Part -1&2 (1993). The short circuit breaking capacity of MCCBs shall be 50 kA for 1 second and these shall be designed for type-2 co-ordination as per IEA-292-IA.

3.6.3.4 Control Panel



3.6.3.5 Cleaning, Painting and Protection

- i) All sheet steel equipment shall undergo rigorous metal treatment by a modern 9- tank process. Panel finish shall be white inside and out side shall be shade no. 631 of IS 5: 1994.

3.6.3.6 Cables

- i) L.T. Power & Control Cables
LT power and control cable shall be 1.1KV grade multicore heavy duty PVC insulated, PVC sheathed steel wire armoured with stranded aluminium conductor as per IS: 1554 (Part-1) - 1988 cables shall be suitable for steady conductor temperature of 70°C. The insulation of inner and outer sheaths shall be of extruded PVC as per IS 5831-1984.
Heat shrinkable type cable termination kits shall be used. The technical particulars of cables shall be submitted.

3.6.3.7 Conduits

The rigid conduits shall comply with clause No. 5.1 C of IS 9537 - 1981 (Part II).

3.6.3.8 Cable Trench

If required suitable cable trench to be made for cable laying.

3.6.3.9 Cable Racks

- i) Cable racks made of MS angles and flats shall be provided inside the cable trench.
- ii) Ladder type cable racks of 450/300-mm width shall be used. It will be fabricated from 50 x 50 x 6 MS angles for longitudinal members and 25 x 6 MS flats for cross members placed at an interval of 300 mm along the length of the rack with a provision of double cross members at a distance of 600mm for cable clamping. Length of single piece of cable rack shall be 3 metres.
- iii) Supporting MS brackets for the support of cable racks shall be provided at an interval of 1500mm. Brackets shall be made of 65x 65 x 6 mm MS angles.

3.6.3.10 Earthing

The earthing (grounding) of the entire Coal Mine Water Treatment Plant unit shall be carried out by the Contractor in accordance with IS:3034-1987. Earthing pit to be made for whole plant including all the equipment/instrument.

3.6.3.11 Lists of Preferred Makes of electrical items are as follows.

3.7 Proposed Instrumentation System

3.7.1 Data Acquisition System (DAS)

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3.7.2 Equipment Specification: See Annexure-I

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3.7.3 Total control schedule

3.8 CIVIL WORKS

- a. Dimension of New shed is 26 m x 20m (approx).
- b. Structural column is to be fixed at 3.50 m center to center distance on RCC footing, MS roof truss including purlins, corrugated galvanized iron roof sheeting 0.80 mm thick as per IS: 272 with vertical side sheeting.
- c. 1st Class brick work for wall along with 15mm cement plaster 1:6 will be provided around the building keeping provision of steel doors, steel windows and one M.S. Rolling Shutter standard size as per Industrial requirement.
- d. All foundations of equipments and supporting structures like platform, stair will be M-20 grade ie, 1:1.5:3.
- e. RCC works for Mine water storage rectangular tanks each having capacity 50,000 litres (size: 7.00 m x 5.00 m x 1.50m) will be M-20 grade with asphalt lining including necessary nozzles, overflow drains etc as per direction at site.
- f. R.C.C work M-20 grade will be provided for treated water reservoir (1 No) of capacity 12,000 liters (size : 3.00 m x 2.00 m x 2.00 m) with necessary inlet, outlet, overflow nozzles, Manhole including drain, Provision of level indicator and liver alarm etc with asphalt lining.
- g. RCC work M-20 grade with asphalt lining for Overhead water storage (1 unit) capacity 50,000 litres including water inlet, outlet and vent, providing and fixing GI pipe as per nearby source of mine water , level indicator and level alarm with MS stair case. The height of the tank 18.00 m.

3.8.1 Materials and Workmanship Specification

3.8.1.1 Cement

Cement shall be either ordinary Portland cement conforming to IS: 8112-1989 or Portland Blast furnace slag cement conforming to IS:455-1989. It shall be fresh and fit for use.

3.8.1.2 Stone Aggregates

The aggregates shall be obtained from crushing of sound stones and the physical quality in respect of size, gradation and strength shall conform to the provision of IS 383-1970.

3.8.1.3 Fine Aggregates

Fine aggregates (sand) shall be either river sand or pit sand and the quality shall conform to the provision of IS 383-1970.

The preparation, placing and curing of concrete shall conform to the provision of IS 456-1978.

3.8.1.4

The floor base shall be cement concrete (thickness 100mm) laid on 75mm thick C.C 1:4:8 well-compacted sub grade and metallic hardener floor finish shall be with 40mm thick cement concrete grade M15 with 10 mm and down graded stone aggregates. Cement punning shall be applied on top of the RCC floor base while it is in green state.

3.8.1.5

Drain shall be provided all around the apron and shall be lead to final discharge drain/low lying area. The drains shall be constructional in brick works with.

3.8.1.6

All other works not mentioned herein shall be carried out as per provision of latest IS codes.

3.9 STRUCTURAL WORKS

3.9.1 General Description of Structures

The following gives only general description of structural units. The structural works shall not be limited to these but shall be guided by technical/technological aspects for the total scope of the work.

- i) Working platforms at different places depending on requirement
- ii) Chimney for letting out waste gas conforming to pollution control regulations

3.9.2 Technical Specification

3.9.2.1 Design parameters

The steel structures envisaged here shall be designed as per IS: 300-1984 Superimposed loads shall be considered in accordance with IS: 875-1987 in addition to technological loads. Buildings shall be designed for wind loads. Wind load on structures shall be considered as per IS 875-1987. All structural steel work shall be of welded construction.

3.9.2.2 Materials

i) Structural steel

All structural steel shall be of tested quality. Mild steel shall conform to IS: 2062, Gr.A - 1992 for rolled sections and plates up to 20mm thickness or IS: 2062, GRB -1992 for plates and sections above 20mm thickness. Mild steel used in gutters and collector pipes shall conform to IS 2062, GR.A - 1992, copper bearing quality. Medium or high tensile steel shall conform to IS: 8500-1992. Roof shall be in galvanized corrugated steel sheets 0.80mm thick conforming to IS:272-1992 and the fasteners shall conform to IS:730 -1978.

The Contractor shall submit the test certificate conforming to appropriate standards of all steel materials used for fabrication. All structural steel shall be free from rust, scales, lamination, cracks, fissures and other surface defects.

ii) Bolts and Nuts

All bolts and nuts conform to IS: 1363 -1992 or IS: 1364 - 1992 as applicable and unless specified otherwise shall be hexagonal. Material for bolts and nuts shall be as per IS: 1367 - 1992. All nuts shall conform to property class compatible to the property class of the bolts used. The contractor shall submit test certificates when called for.

iii) Washers

Plain washers shall be made of mild steel conforming to IS 5369 - 1975 unless otherwise specified. One washer shall be supplied with each bolt and in case of special types of bolts more than one washer as needed for the purpose shall be supplied. Spring washers shall conform to IS 3063 - 1994. An additional double coil helical spring washer conforming to IS: 6755 - 1972 shall be provided for bolts carrying dynamic or fluctuating loads and those in direct tension. Tapered washers conforming to IS: 5372 - 1975 and IS: 5374 - 1975 shall be used for channels and beams receptively.

iv) Welding

The welding and the welded work shall generally conform to IS-816 – 1969 and IS: 9595 - 1980 unless otherwise specified. As much work as possible shall be welded in shops and the layout and sequence of welding shall be so arranged as to eliminate distortion and shrinkage stresses. Electrodes shall conform to IS: 814 - 1991.

v) Painting

All the fabricated and erected structures shall be duly inspected and shall be made defect free. All fabricated structures shall receive two coats of approved make red oxide zinc chromate primer as per IS: 2074 - 1992 and the finishing paint on erected structures shall be a minimum of 2 coats of aluminum paint conforming to IS:2339 - 1963 or synthetic enamel paint conforming to IS:2932 - 1993. Care is to be taken in painting the structures, which are subjected to corrosion and rusting.

vi) Fabrication, Erection, Testing and Commissioning

Fabrication, erection, testing and commissioning of steel structures shall be in accordance with IS: 800- 1984 & IS: 215 -1974.

3.9.3 SAFETY AND ACCESSIBILITY

There shall be adequate provisions for access to and around equipment for operational and maintenance functions. All moving and exposed parts shall be adequately guarded.

Following portable type first aid Fire Extinguishers has been envisaged for the Test Rig.

Type	Capacity	Nos.
Water type Fire Extinguishers conforming to IS: 940 – 1976	9 liters	1
DCP type Fire Extinguishers conforming to IS: 2171 – 1976	10 kg	1
CO ₂ type Fire Extinguishers conforming to IS: 2878 – 1976	6 kg	1

All safety provisions are required under the Indian Factory Act and other statutory regulations shall be fully complied with.

3.10 The equipment shall be provided with suitable lifting attachment to facilitate erection and maintenance, wherever necessary.

3.11 Tenderer has to submit the list of Makes of different equipment from the Preferred Make list of this document / Preferred Make list of CIMFR along with tender Document. These makes will be considered subject to approval of the Purchaser.

4.0 PERFORMANCE GUARANTEE

4.1 System Performance Parameters during performance guarantee test shall be as per approved details, meeting requirements of equipment supplier manual and as agreed with the purchaser. Performance Guarantee Parameters and other terms & condition of P.G. Tests shall be necessarily taken care of.

4.1.1 The Successful Tenderer shall manufacture the items/materials strictly as per the Purchaser's specification and maintain quality and workmanship.

4.1.2 The Tenderer shall guarantee the satisfactory performance of experimental Coal Mine Water Treatment Plant.

4.1.3 The Tenderer shall also furnish the test procedure for performance evaluation as per Schedule.

4.1.4 Experimental Coal Mine Water Treatment Plant installed should be able to efficiently carry out the coal mine water test for different test conditions.

4.1.5 Parameters & other modalities of Performance Guarantee test shall be mutually discussed & decided. The following points will have to be met by the Tenderer :

4.2.1 All components and equipment of the supplied Experimental CMWT Plant should operate smoothly.

4.2.2 All drives of the supplied system operate smoothly and without abnormal vibrations and unsteadiness.

4.2.3 All controls can be conveniently operated from the control desk.

4.2.4 All safety provisions and interlocks shall work as envisaged.

4.2.5 All signaling and alarms shall function normally.

4.2.6 All control equipment; instruments shall function normally in all modes of operation.

4.2.7 The complete supplied system shall function normally in all modes of operation.

5.0 SPECIAL INSTRUCTIONS TO TENDERER

5.1 The offer shall be submitted in 4 (four) sets complete in all respects as per the “Invitation to Tender”. The following details/information shall be submitted along with the offer:

- i) General description of design consideration and all the assumptions made by the Tenderer.
- ii) Pollution control Board clearance & any other statutory clearance are required for this pilot plant will be taken by the tenderer.
- iii) GA drawing of equipment alongwith complete specifications and details of sub-assemblies indicating overall dimensions, technical parameters etc.
- iv) Catalogues/ brief description of brought items.
- v) Time bar chart of delivery showing break up of time required for engineering, order placement for brought item and their delivery to shop, Assembly, testing, inspection and dispatch.
- vi) Q.A.P. (Quality Assurance Plan)
- vii) List of exclusions, deviations and reference list.
- viii) Weight of each items/equipment.
- ix) Complete motor details like kW rating, CDF, duty class, class of insulation, make etc.
- xi) List of commissioning spares, testing procedure.
- xii) Preliminary load data.
- xiii) Any other details which may be felt necessary.

5.2 All tools & tackles, apparatus, special instruments required for erection, testing, commissioning and establishment of Performance Guarantee Test (PGT) shall be arranged, stored, maintained and guarded by the Successful Tenderer.

5.3 All construction equipment such as welding/gas cutting requirements, compressors etc., shall be provided, maintained, manned and guarded by the successful Tenderer.

5.4 Until the equipment is handed over to the purchaser, the successful Tenderer shall be soul custodian of all materials, equipment's, assembled at site and will be responsible for loss, theft, damage or destruction. For this purpose the successful Tenderer shall take out a “Contractor Risk Insurance” at his own cost to cover the assets.

5.5 The responsibility of making adequate storage and handling facility for issue of material and maintaining them rests with the Successful Tenderer.

5.6 Incomplete Tenders are liable to be rejected.

5.7 On completion of work, all rubbish debris, temporary supports, enabling structures etc. shall be removed from the site and the site (including storage site) handed over to the purchaser in a tidy manner. All scrap etc. shall be dumped suitably at specified places as directed by the purchaser.

5.8 EXCLUSIONS/DEVIATIONS/REFERANCE LIST

5.8.1 Exclusion in the offer, if any, shall be clearly stated under the heading “Exclusions”, quoting the respective serial reference number in the tender document.

5.8.2 Deviations from the Tender Specifications, if any, shall be clearly stated under the heading “Deviations” quoting the respective serial reference no. in the tender document.

5.8.3 The Tenderer shall submit alongwith his tender a statement under his signature the official seal, a list of similar jobs executed in the past five years indicating the name of the purchaser, job title, value of work, order reference, time period of delivery/execution as per the order, actual period of delivery/execution and reasons for any delay. Any tender without this statement may not be considered.

5.9 ERECTION AND COMMISSIONING

5.9.1 The successful Tenderer shall provide all equipment, tools, tackles, consumables materials, labour and supervision for carrying out the following:

- i) Transportation from site storage, unpacking, handling, assembling, bolting, welding and satisfactory installation of all equipment and materials including electrical at proper locations according to the drawing and/or manufacturer's instruction book.
- ii) Aligning, leveling, coupling and securely fixing all equipment and accessories in accordance with the drawings and/or manufacturer's instruction book.
- iii) Conducting in co-ordination with Tenderer, manufacturer's representative, and Purchaser's representative all initial runs, tests and all work required for putting the system alongwith equipment into satisfactory and stable operation.

5.9.2 The successful Tenderer shall be responsible for the proper erection of the system along with all accessories as per recommended procedure of manufacturer and approved drawings. The erection work shall be carried out as per modern engineering practice with the help skilled and experienced workforce. The successful Tenderer shall use his own tools and tackles required and provide sufficient manpower for erection, testing and commissioning of these systems and interconnecting piping.

5.9.3 On completion of erection work, all the systems shall be tested alongwith the associated equipment for proper performance.

5.10 SPARES

5.10.1 The Tenderer shall include in his offer and provide with equipment sufficient quantity of spares required for proper erection and commissioning of the system. The Tenderer shall furnish the list of commissioning spares included in the offer. All unused spares after erection shall be handed over to the purchaser after commissioning of the system at free of cost.

5.11 COMPLETION PERIOD

5.11.1 The Tenderer shall quote the best and earliest completion period of this package. The Tenderer shall submit implementation chart giving total time schedule.

5.11.2 The Project will be executed on TURNKEY basis and the Project must be completed within months from the date of award of LOI.

5.11.3 The Successful Tenderer in consultation with the purchaser shall draw up a detailed time schedule for completion of the various jobs involved.

5.11.4 If, any time the purchaser finds that any particular work is not progressing properly according to the approved detailed program, the purchaser shall have the right to take over the particular work for execution by himself or by any other agency at the risk and cost of the Successful Tenderer, provided such delays are due to the Successful Tenderer.

5.11.5 The purchaser reserves the right to accept/reject the offer in totality or split the scope of supply or alter the specified quality of supply or delete any item from the scope of work without assigning any reason.

5.11.6 The purchaser has the right to split the order and place the order on more than one party.

5.11.7 TECHNICAL CAPACITY OF THE TENDERER

5.11.8 SECERACY AGREEMENT

The drawing and document enclosed remain fully, CIMFR's property and can neither be produced nor communicated to third party in any way, nor utilized any other purpose, without a written consent of the CIMFR.

5.12 Billing and Payment Schedule: As follows:

Billing and Payment Schedule

S.N.	Description of work	Payment schedule		
		Supply	Erection	Final Payment
1.	Detail Design and Engineering of the system including layout plan.	60% of the quoted value after approval of the design and engineering part.	20% after erection and alignment of work at site.	20% after the completion and successful running of the plant.
2.	Supply, fabrication and erection of the equipments and components along with all accessories and electrical fitting: a) Steam Generation System & associated accessories and equipments. b) Softener, iron filter, feed and reaction vessels, flocculation vessels, clarifier, pressure filter and required pumps, pipes, valves etc. c) Ozone generation units including required accessories.	60% after receiving and inspection of the material at construction site and work satisfaction on component wise.	20% after the erection, installation and alignment of the components.	20% after the completion and successful running of the plant.
3.	(a) Construction and related civil works including foundation of the equipments and supporting structures, storage and over head tanks, stairs etc. (b) Construction of appropriate shed for housing plants and equipments, chemical storage and quality control room as per the layout plan. (c) Electrification and accessories including illumination work at site.	70% after completion of the related work on component wise at work site.	20% after erection and completion of the building and plant at site	10% after the completion and successful running of the plant.
4.	Testing and commissioning of the entire plants without load.		70% after successful test with no load	30% after successful commissioning and running of the system with full load.
5.	Final commissioning and running of the plant with full load.			100% after successful commissioning and running of the system with full load.

Note:

1. Minimum billing amount should be Rs. 15 Lakhs except the final payment
2. 10% of bill value will be deducted from each running bill as performance guarantee cost which may be released after one year from the date of handing over the plant or may be released against bank guarantee which may be valid for one year the date of handover the plant.
3. Taxes and duties etc. may be paid 100% against each bill without any deduction against supply etc.

Annexure-I

MINE WATER RECLAMATION UNIT FOR SAFE DRINKING WATER

List of Equipments, Equipment Names and Specification

Equipment No.	Equipment Name	Specification
MW-01	Mine water storage 2 Units	Rectangular each having capacity 50,000 liter 7MX5MX1.5M material of construction concrete with necessary nozzles, overflow, drain (M-20 grade).
MW-02	Flocculation vessel 1 Unit	Vertical, partly cylindrical, partly conical material of construction. Mild steel Diameter 2000mm (IS:2062) Cylindrical height - 2000mm, Conical height -1000mm Top open capacity – 7330 Liter Body thickness 6 mm with reinforcement 4 Nos. baffles inside 4 Nos. lugs for support Driven by 5 H.P motor (rpm 1440) with Gear Box (50:1), V-Belt Drive Final r.p.m.20±20% 2 Nos. stirrer (1) 800 mm Turbine Driving System supported (2) 800 mm Propeller on channels.
MW-03	Water Heating Vessel 1 Unit	Vertical, Cylindrical Diameter 700 mm Height -1900 mm Top closed with open Vent Material of construction mild steel (IS:2062) Capacity 730 Liter Body thickness 5 mm With 3 Nos. steam spargers Sparger diameter 500 mm Insulation with 1” glass wool with thermometer pockets and necessary nozzles.
MW- 04	Reaction/Mixing Vessel 1 Unit	Vertical, partly cylindrical, partly conical material of Construction SS316 Total volume 3000 Liter Diameter 1250 mm Cylindrical height 1750 mm Conical height -500 mm Top open Body thickness 5 mm, No. of Baffles – 4, No. of stirrer blades – 3 on same shaft 1)Turbine type 1 No. 2) Propeller type- 2 No., Drive Motor 5 H.P (1440 rpm) with Gear Box 30:1 with v-Pulley, final r.p.m. 30±20% With steady bearing at bottom Driving system supported on channels with thermo pockets and necessary nozzles.

MW-05	Clarifier Dorr Thickener type 1 Unit	Vertical Cylindrical Material of construction - Mild Steel (IS-2062) Diameter 5500 mm Total Height 2500 mm With rotating rakes (long and short arm blades); slow speed Rotating Speed 2 r.p.m. $\pm 20\%$ Support mechanism for supporting Driving unit with motor, Gear Box. Feed Well and overflow weir throughout periphery With discharge cone.
MW- 06 MW- 08	Water Collector 2 Units	Cylindrical, vertical material of construction – Mild steel (IS-2062) Capacity 6200 Liter. Diameter – 2000 mm Height – 2000 mm, Body thickness 5mm with stiffener. With inlet/outlet nozzles With level indicator.
MW-07	Pressure Filter with Pump 1 Unit	Sparkler type Pressure Filter Vertical Plates Self Cleaning Type Capacity sufficient for passing 5000 liter/hr.
MW-09	Ozoniser – 1 Unit SS-316	Ozoniser/contactor suitable for 4000 Liter/Hour of flowing water with suitable bubbling system (approx. 10gm/hr ozone supply).
MW - 10	Ozone Generator – 1 System	Consisting of 1) Air Preparation e.g. drying, dust and oil separation. 2) Electrical System including transformer 3) Ozone Generator All suitable for 4000 Liter/Hr. of flowing water.
MW-11	Treated Water Receiver 1 Unit	Rectangular, Vertical Material of construction concrete (M20 grade) Capacity 12000 Liter Length – 3000 mm, width 2000 mm, Height – 2000 mm. With inlet, outlet and overflow nozzles, Manhole and drain. With level indicator and level alarm.
MW-12	Overhead Water Storage 1 Unit	Concrete Water Storage Capacity 50,000 liter with water inlet and outlet and vent (M20 grade). With level indication and level alarm switch. With Mild Steel Staircase Height – 18 meter
CA- 01 & CA- 02	Alol Preparation Vessel & Feol Preparation Vessel 2 Units	Vertical, cylindrical with dished bottom and flanged dished top. Capacity 500 kg/batch Material of construction SS316 with heating and cooling jacket of mild steel (IS2062). Diameter – 800mm Cylindrical height – 1200mm Body thickness 5mm Jacket body thickness 6mm with helical reinforcing stiffener stirring system with 2 Nos. Turbine Blades Stirrer rod 60 mm dia with flexible coupling, bearing housing, steady bearing Driving system with 5 HP Motor (1440 rpm) Gear Box 10:1 with V-pulley Final speed 150 r.p.m. $\pm 20\%$ With 2 nos. baffles Manhole and necessary nozzles 4 Nos. lungs.

CA- 03 CA- 04	Alol collection Vessel and Feol Collection Vessel 2 Units	Vertical ,cylindrical mounted on trolley, Capacity 600 ltr. MOC SS316; Body thickness 3mm open top
CA- 05	Flocculent Solution Vessel 1 Unit	Vertical Cylinder material of construction SS 304 Capacity 600 Liter Top open Body Thickness 4mm Stirred rod 50mm dia Diameter 800 mm Height 1200 mm With propeller type stirrers Driven by 3 h.p. motor (1440 rpm), Gear Box 20:1 with pulley, Flexible coupling and Bearing housing; R.P.M. 70±20% with 2 Nos. baffles and 4 lugs with necessary nozzles. With level indicator.
CA- 06	Flocculent Collection Vessel 1Unit	Vertical Cylindrical, mounted on trolley Capacity 600 Liter MOC –SS 304 Body Thickness 3mm Open Top
CA- 07 CA- 08	Alol/ Feol Feed Vessel 2 Units	Vertical Cylindrical, Material of construction SS316, Capacity 260 Liter Top open Diameter 650 mm, Height – 800 mm Body Thickness 3 mm with stiffener With loose cover, with level indicator and necessary nozzles and 2 No. lugs
CA- 09	Flocculants Feed Vessel 1Unit	Vertical Cylindrical, Material of construction SS304. Capacity- 600 liter. Top open with loose cover Diameter 800mm, Height 1200mm Body thickness 4mm With level indicator and necessary nozzles, 2 nos. lugs
CA- 10	Sodium Carbonate Solution/Feed Vessel 1Unit	Vertical Cylindrical Material of construction SS304 Capacity – 600 liters, Diameter 800mm, Height- 1200mm,Body thickness 5 mm with propeller Stirrer Drive 2.h.p.motor (1440 rpm) Gear. Box 20:1 with pulley, Speed 70 r.p.m. ±20% With flexible coupling and bearing housing, Top open; Drive system mounting on channels With level indictor 2 Nos. baffles and 2 lungs and necessary nozzles.

STEAM BOILER UNIT – COAL FIRED

1. Coal fired Boiler : Capacity 150 Kg. per Hour
Low pressure (2-3 kg/cm²)
2. Process Water Tank : HDPE Tank 15000 Liter.
3. Iron Filter For :
4. Water Softener :
5. Soft Water Tank : HDPE Tank 15000 Liter.

PUMPS

	Nos.
P-1 Coal mine water to flocculation vessel centrifugal pump. Cast Steel Capacity 4000 liter/hour – 3 M Head Pump type- Centrifugal non clogging	2
P-2 Flocculation vessel to water heater centrifugal Pump. Cast steel Capacity 4000 liter/hour – 6 M head.	1
P-3 Water collector I to pressure Filter Centrifugal Pump Cast Steel Capacity 4000 liter/hour – 15 M Head	1
P-4 Water collector – II to Ozoniser - Centrifugal pump, Cast Steel, Capacity 4000 liter/hour – 5 M Head	1
P-5 Treated water collector to overhead storage- Centrifugal pump Cast Steel, Capacity 6000 liter/hour – 20M Head.	1
P-6 Portable Barrel Pump- Stainless steel (SS316) Capacity 800 liter/hour – 5M Head	3
P-7 Soft water to soft water storage- Centrifugal Pump, Cast Steel, Capacity 4000 liter/hour – 3M Head	1
P-8 Boiler Feed Pump (Part of Boiler Supply)	1
P-9 Flocculater sludge discharge pump- Diaphragm Type	1
P-10 Clarifier Sludge Discharge Pump- Diaphragm Type	1
P-11 Metering/Dosing Pump for addition of chemicals- Stainless Steel Plunger Pump	1

INSTRUMENTS

1. pH meter/indicator
2. On Line pH meter and controller
3. Temperature meter /Indicator
4. Online temperature indicator and controller including steam flow control valve.
5. Water Flow Meter 2 Nos
6. Level Indicator/Limit Switch/ Level Controller 4 Nos.
Instrumental Panel for above.

PIPELINE AND VALVES

For the main steam 75mm to 100mm pipeline of mild steel is required.

Pipelines are connected through flange joint.

For chemicals and additives stainless valves used are mostly

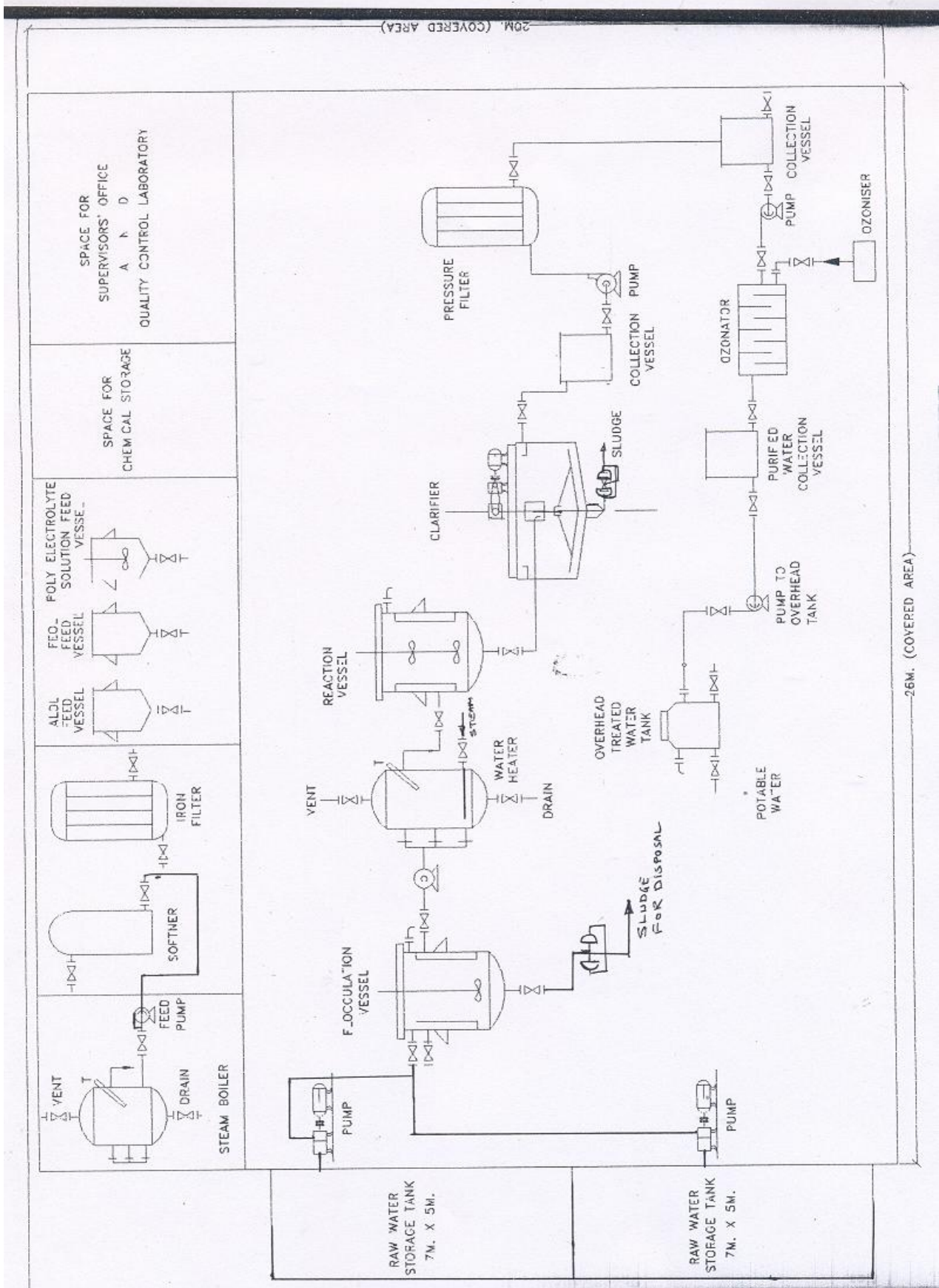
1. Glove Valve
2. Ball Valve
3. Diaphragm Valve

Single point mine water supply by pipe shall be provided at a distance 500 mt. (Approx.) away from the test site. Vendor shall make necessary pump, sump and piping arrangement to transport mine water to the test site.

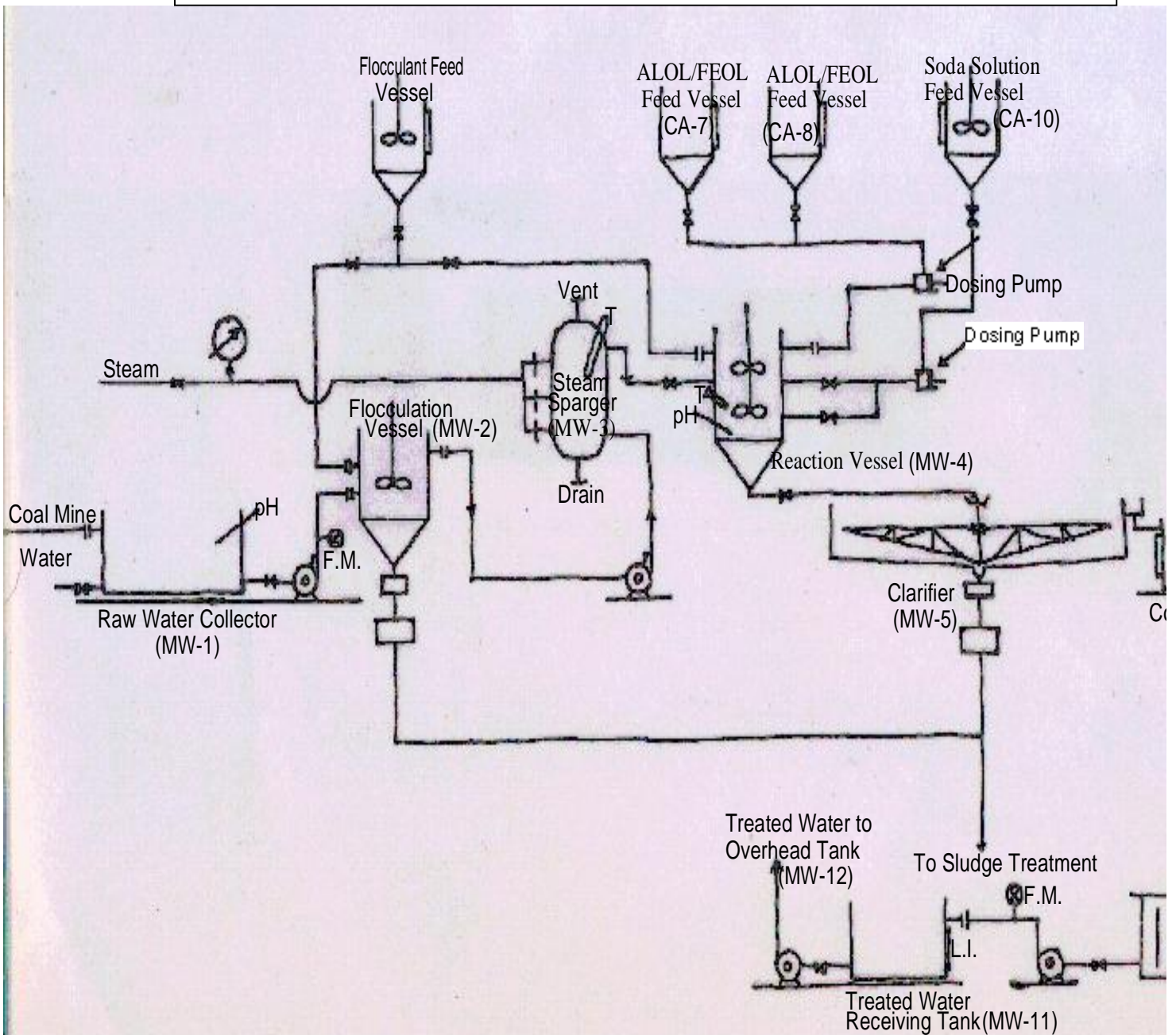
Necessary power for running the plant shall be available. Vendor may make estimate of requirement. Electrification and erection of an appropriate shed for housing the plants and equipments as per the layout should also be worked out and included in the offer.

Note: Equipments specification as given in equipment list is governing and any deviation from it should be clearly mentioned in the offer.

Layout Plan for Mine Water Treatment Plant



TREATMENT PROCESS FLOW SHEET





Central Institute of Mining & Fuel Research

Erstwhile Central Mining Research Institute (Council of Scientific & Industrial Research)

Barwa Road Campus, Dhanbad –826015 (Jharkhand), INDIA

COMMERCIAL TERMS & CONDITIONS

Important Notice

The Commercial Terms & Conditions is given in five different sections, which may please read carefully before submitting the tender. Any deviation and non-compliance of the terms & conditions must be written clearly. An incomplete offer and late bids are liable to be ignored and rejected. To aid the Bidders in submitting complete offers, a Check List is included in the bid document. The bidders must fill this and submit along with their offer in their own interest to avoid rejection of their tender.

Request For Proposal (RFP)

NIT No.

CIMFR/PUR/14(3)2009

1.Last Date for Submission of Bid :

21.12.2009 upto 4 PM

2.Date of Opening of Tender(only Technical Bid in case of Two Bid System) :

22.12.2009 at 11 AM

3.Date of Opening Financial Bid wherever applicable : TENDERERS WHOSE TENDERS ARE
FOUND TECHNICALLY SUITABLE

SECTION - I

INVITATION FOR THE BIDS

Sealed tenders are invited under **Two Bids System** 1. Technical-Commercial Bid and 2. Financial Bid for the products mentioned in our Global / Open Tender Notice required to be supplied, installed, commissioned and demonstrated at CIMFR, Dhanbad. **Technical- Commercial Bid and Financial Bid should be identical in all respects except that the Technical-Commercial Bid should have blank space at the place where prices have been indicated in the Financial Bid.**

Tenderers are requested to submit their tenders in three separate envelopes 1. EMD Envelope, 2. Technical-Commercial Bid Envelope and 3. Financial Bid Envelope duly sealed and super scribed with "Tender No. and Description of item" strictly as per our Technical specifications and Terms and Conditions.

Technical-Commercial Bid should consist of:

1. Technical specifications being offered by the firm of Tender Documents along with Brochures and literature giving all features.
2. Certificate of Registration of firm
- 3. Authorization Letter from the manufacturer to quote and submit tender.**
4. Certificate of valid Authorised Distributorship/Dealership/Retailer ship from the manufacturer.
5. Latest Income Tax Clearance Certificate
6. Certificate of Central Sales Tax/Local Sales Tax Registration No. Authorised Service Provider Certificate from the Manufacturer only.
- 7. Photocopy of Warranty Service Provider Agreement between the manufacturer and the Service Provider.**
8. Clients list along with addresses, Telephone Nos., Fax Nos., Contact persons. Product supplied, Qty. supplied, Performance Certificates/Bench marking of the equipments by recognized National/Institutional/ Govt. organization like Department of Electronics.
9. Last Audited Balance Sheet of the firm.
10. Maintenance Infrastructure Facilities including addresses, Telephone No. of Service Centre.
11. Photocopy duly attested of Certificate of compulsory enlistment of Indian Agents of Foreign Principals with DGS&D (**wherever required**) quoting on their behalf. Date of enlistment must be before the date of opening of tenders.
12. Details of Equipments supplied of identical or similar nature to other CSIR Labs/Institute for the preceding three years along with the prices eventually or finally paid.

Commercial Terms :

- a. Percentage rate of CST/LST, Octroi, freight and forwarding charges, handling charges, loading/unloading charges, any other tax/charge as applicable should be clearly mentioned. The offers indicating "Taxes as applicable" or "Taxes inclusive" may be rejected.
- b. Validity of Quotation
- c. Delivery Period
- d. Payment Terms
- e. Warranty
- f. Training
- g. Discount
- h. Terms of Delivery
- i. Post Warranty AMC
- j. Performance Security Deposit
- k. Liquidated Damages
- l. Installation, testing and commissioning charges
- m. Percentage of Agency Commission in case of imports.
- n. Agency Commission should be included in the FOB Price and will be paid to the Indian Agents if registered with DGS&D (**wherever required**)
- o. Gateway Airport in case of shipment from abroad
- p. Beneficiary Bank and SWIFT No. in case of imports

Financial Bid should consist of:

Basic Price in case of indigenous supply/FOB price in case of imports

Commercial Terms

a. Percentage rate of CST/LST, Octroi, freight and forwarding charges, handling charges, loading/unloading charges, any other tax/charge as applicable should be clearly mentioned. The offers indicating "Taxes as applicable" or "Taxes inclusive" may be rejected.

b. Validity of Quotation

c. Delivery Period

d. Payment Terms

e. Warranty

f. Training

g. Discount

h. Terms of Delivery

i. Post Warranty AMC

j. Performance Security Deposit

k. Liquidated Damages

l. Installation, testing and commissioning charges

m. Percentage of Agency Commission in case of imports.

Agency Commission should be included in the FOB Price and will be paid to the Indian Agents if registered with DGS&D (**wherever required**).

n. Gateway Airport in case of shipment from abroad

o. Beneficiary Bank and SWIFT No. in case of imports

The bids complete in all respects addressed to the Director, CIMFR should reach at the following address **latest by 4.00 PM on 21.12.2009.**

Central Institute of Mining & Fuel Research

Erstwhile Central Mining Research Institute

(Council of Scientific & Industrial Research),

Barwa Road Campus, Dhanbad -826015, JHARKHAND, INDIA

' : 0091-0326-2296030, 6: 0326-2296030,2202429

STD CODE: 0326

The Tenders (Technical Bids only wherever applicable) will be opened in this Office at 11 A.M hours on 22.12.2009 in the presence of Bidders (only one representative of the firm) who is willing to participate in the tender and whose EMD is in order.

SECTION - II

INSTRUCTION TO BIDDERS

1. Scope of Work:

Supply installation, testing, commissioning, demonstration and training in the usage and administration of procurement of products mentioned in our Open Tender Notice.

2. Bidders:

The invitation for Bid is open to all Indian Original Equipment Manufacturers / Authorized Distributors/Authorized Dealers/Authorized Retailers/Foreign Manufacturers or suppliers directly/authorized Indian Agents. In such cases where the tenders are submitted by the Indian Agents of their Foreign Manufacturer/Supplier or directly by the Principal to CIMFR, then the tender of Foreign Manufacturer/Supplier will only be considered and CIMFR will deal directly with the Foreign Manufacturer/Supplier or otherwise as decided by Director' CIMFR.

3. Cost of Bidding:

The bidders shall bear all costs associated with the preparation and submission of its bid and CIMFR will in no case be responsible or liable for these costs regardless of the conducts and the outcome of the bidding process.

4. The Bidding Documents:

The goods and services required, bidding procedures and contract terms are prescribed in the bidding document. In addition to the invitation for the bids, the bidding document includes:

- a) Instruction to bidders
- b) Schedule of requirements
- c) Technical Specifications
- d) Terms & Conditions
- e) Bid form and price schedule

The bidder is expected to examine all instructions, forms, terms and conditions in the bidding document. Failure to furnish all information required or submission of bid not substantially responsive to the bidding documents in every respect will be at the bidder's risk and may result in rejection of its bid.

5. Preparation of bids:

The bids are to be submitted in three separate sealed envelopes

- a) Earnest Money Deposit
- b) Technical-Commercial Bid
- c) Financial Bid

6. Submission of Bids :

a) Sealing and Marking of Bids

- i) The bids shall be submitted in three separate sealed envelopes addressed to **The Director, Central Institute of Mining & Fuel Research, Barwa Road, DHANBAD-826015 JHARKHAND, INDIA** which shall be marked as "EMD", "Technical-Commercial Bid" and "Financial Bid" mentioning Tender Number, Description of Item and Date of Opening and all the three envelopes should be put inside the big envelope.
- ii) The Envelopes shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared late and delayed.

Telex, cable, facsimile and unsigned bids will not be considered and rejected.

b) Deadline for submission of Bids

- i) Bids must be received by CIMFR at the address given in Section-I not later than the time and date specified on the cover page. In the event of the specified date for the submission of bids being declared a holiday for CIMFR, the bids will be received up to the appointed time on the next working day.
- ii) The Director, CIMFR may at his discretion extend the deadline for submission of bids by amending the bid documents, in which case all rights and obligations of the purchaser and bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

c) Late Bids

Any bid received after the deadline for submission of bids prescribed by CIMFR will be rejected and/or returned unopened to the bidder.

d) Bid Opening and Evaluation

Opening of Technical Bids by Purchaser

The Purchaser will open all Technical-Commercial Bids, if the EMD, is submitted as per requirement in the presence of bidders' representatives who choose to attend, at the time, on the date and venue indicated in Section-I. The bidders' representatives present there, shall sign a register evidencing their attendance. In the event of the specified date of the bid opening being declared a holiday for the Purchaser, the bids shall be opened at the appointed time and location on the next working day.

e) Clarification of Bids

- i) During evaluation of the bids, the purchaser may at his discretion ask the Bidder for clarification of bids. The request for clarification and the response shall be in writing and no change in price or substance of the bid shall be sought, offered or permitted.
- ii) No Bidder shall contact the Purchaser on any matter relating to its bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Purchaser, it should be done in writing.
- iii) Any effort by a Bidder to influence the Purchaser in its decisions on bid evaluation, bid comparison or contract award decision may result in rejection of the Bidder's bid.

f) Evaluation of Technical Bid

- i) Prior to the detailed technical evaluation the purchaser will determine the substantial responsiveness of each bid to the Bidding Documents. A substantially responsive bid is one that conforms to all the terms and conditions of the Bidding Documents without material deviations.
- ii) A bid determined as not substantially responsive will be rejected by the purchaser and may not subsequently be made responsive by the Bidder by correction of the non-conformity.
- iii) All the vendors will have to bring their equipment/machine for testing and technical evaluation/bench marking as and when asked for, if required. Separate communication will be sent in this regard.

The bidders short listed by the purchaser based on evaluation of their technical bids may be called for detailed discussion including presentation of their equipment system to a team selected by the purchaser for the purpose, at a specified date, time and venue, if needed.

g) Opening of Financial Bids

i) The purchaser will open the financial bids of only those bidders, which are found to be technically qualified to undertake the job. The time, date and venue of opening of financial bids will be intimated to these technical qualified bidders only.

ii) The Financial Bids of the technically qualified bidders shall be opened in the presence of their representatives, who are willing to participate, on the specified date, time and venue.

h) Evaluation and Comparison of Bid

i) The comparison shall be of all inclusive price of goods, inclusive of all costs as well as taxes paid or payable and the warranty period asked for.

ii) Arithmetical errors will be rectified on the following basis: if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity the unit price shall prevail and the total price shall be corrected. If the supplier does not accept the correction of errors, its bid will be rejected. If there is a discrepancy between words and figures, the amount in words will prevail.

iii) Bidders shall state their bid price for the payment schedule. Bids will be evaluated on the basis of this base price. Bidders are however, permitted to state an alternative payment schedule and indicate the reduction in bid price they wish to offer for such alternative payment schedule. The purchaser may consider the alternative payment schedule offered by the selected Bidder but it may not be binding on purchaser.

i) Placement of Purchase Order

The purchaser will place the purchase order on the successful bidder whose bid has been determined to be substantially responsive and has been determined as the best evaluated bid provided further that the bidder is determined to be qualified to perform the contract satisfactorily.

SECTION - III

TERMS & CONDITIONS

1. Submission of Tenders: Sealed tenders must be submitted in an envelope duly super scribing "Tender/File Ref.No., Description of item and Date of Opening" addressed to **The Director, Central Institute of Mining & Fuel Research, Barwa Road, Dhanbad - 826015 JHARKHAND, INDIA** in the Tender Box kept in the Office of the Stores & Purchase Officer, CIMFR, **latest by upto 4 PM on 21.12.2009 positively. Request for extension of submission date of tenders will not be considered.**

2. Late/delayed tenders : Late/delayed tenders due to any reason whatsoever will not be accepted / considered at all under any circumstance.

3. Opening of Tenders: The tenders received will be opened at **11 A.M. on 22.12.2009** in the presence of the authorized representatives, if any, of quoting firm (one member only) at this office. **Request for extension of opening date of tenders will not be considered.**

4. Earnest Money Deposit: Tenderers shall have to deposit EMD of amount mentioned in our Global / Open Tender Notice in **Indian Rupees** or in equivalent amount in foreign currency in the form of Crossed Demand Draft/BG only in favour of Director, CIMFR, Dhanbad, issued by Scheduled/Nationalized Bank payable at Dhanbad, India, along with their tenders (with Technical Bid only). **The validity of the EMD submitted in the form of Bank Guarantee must be co-terminous with the validity of the offer. It must normally be valid for six months (180 days) from the date of opening of tender. Tenders received without earnest money will not be entertained/ considered at all and rejected summarily. Tenders received along with EMD in the form of Cheque/Cash will not be accepted/ considered and rejected.**

Firms registered with DGS&D and NSIC may be exempted from payment of EMD if the product being quoted is actually manufactured by them and the product is registered with these agencies. Firms registered with these agencies selling products of other companies and not manufacturing the products being quoted by them are not allowed exemption from payment of EMD. Firms are to submit a legible photocopy duly attested, of Registration Certification of the products manufactured and registered with DGS&D and NSIC for availing EMD exemption before opening of Technical-Commercial Bids, otherwise tender submitted by them will not be considered and rejected summarily.

5. Forfeiture of EMD: The earnest money deposited (EMD) will be forfeited if the vendor withdraws or amends, impairs and derogates from the tender in any respect within the period of validity of tender or fails to furnish the Performance Security Deposit as per Clause No. 6 - Performance Security Deposit mentioned below.

6. Performance Security Deposit: The successful tenderer will have to furnish an unconditional Performance Bank Guarantee in favour of the Director, CIMFR, Dhanbad valid up to sixty (60) days after the warranty from a Scheduled/Nationalised Bank in India for 10% of the total order value within twenty one (21) days of the placement of order for orders where full payment is to be made on Letter of Credit/Sight Draft or on delivery, failing which the purchase order/contract shall be terminated.

b. The successful tenderer will have to furnish an unconditional Performance Bank Guarantee in favour of the Director, CIMFR, Dhanbad valid up to sixty (60) days after the warranty from a Scheduled/Nationalised Bank in India for 10% of the total order value before the release of final payment where payment is to be made on satisfactory supply, installation, testing, commissioning, demonstration and final acceptance of the products.

7. Refund of Performance Security Deposit: The Performance Security Deposit will be returned to the successful vendor after sixty days from the date of the completion of warranty period and no interest would be paid thereon.

8. Warranty: Equipments should be under free ONSITE comprehensive warranty for a minimum period of Two (2) years from the date of completion of satisfactory installation, testing, commissioning, demonstration and final acceptance of the products. A satisfactory service during the warranty period is defined as 95% uptime. In case 95% uptime is not provided, the warranty period would be extendable by a period which is equivalent to the period during which 95% uptime was not provided. **The bidder will also ensure that the spares are available at least for three years after the warranty period for the operation and maintenance of the equipments supplied. The firms giving the warranty offer less than three years must specify the equivalent amount to be charged for additional warranty/per year which will be added to the price quoted for deciding Lowest Tender. Failing to quote the same will lead to rejection of the bid. This must be strictly complied.**

9. Custom Duty and Excise Duty: Our Institution is eligible for payment of concessional Custom Duty and exempted from payment of Excise duty.

a) In case, the tenderers are Indian Agents of the foreign suppliers and quoting prices on behalf of their foreign principals must enclose the proof of enlistment with DGS&D (**wherever required**). Date of enlistment must be before the date of opening of tenders. Tenders of agents not enlisted with DGS&D will be ignored and summarily rejected. The compulsory enlistment of Indian Agents of foreign principals with DGS&D is of general nature and does not confer on the Indian Agents the status of a supplier registered with DGS&D.

b) In case, the prices are quoted in foreign currency, it must be on FOB price. Indian Agency Commission/Technical Service Charges, if any, must also be shown separately and shall be payable in India in Indian Rupees only if the Indian Agent is registered with DGS&D. Kindly indicate Indian Agent's address, their kind of services and percentage Agency Commission (which will be reduced from invoice and paid in Indian Rupees Only). Also quotation should indicate whether Agency Commission is included / excluded in the FOB price.

c) In case of Domestic, the offer should contain the basic price and percentage of Excise Duty separately since we are exempted from payment of Excise Duty.

10. Prices: The price quoted should clearly mention whether

- a) **FOR destination /Dispatching Station by registered road transport**
- b) **FOR free delivery at this office Stores including Packing & Forwarding, freight, insurance charges, etc.**
- c) **Where there is no mention of the above, the offers will be rejected as incomplete.**
- d) **In case of Imports, the quotation should be for FOB price only.**

11. Taxes: The percentage rate of sales tax, resale tax, duties/levies and any other charges etc, should be clearly indicated in the tender, wherever chargeable. The packing charges must be included in the rates. **CIMFR is not authorized to issue C/D Forms.** However, the concessional rate of central sales tax is admissible to Research Institutions from certain States is also applicable to this Institute and necessary Concessional Sales Tax Certificate will be issued. The supplier should submit documentary proof while claiming octroi, naka etc. charges.

12. Annual Maintenance Contract: After the expiry of warranty period, ONSITE Comprehensive Maintenance Contract may be entered into for which the Annual Maintenance Contract (AMC) charges should invariably be quoted in terms of percentage (%) of cost on the exact amount inclusive of all taxes and duties of the product to be supplied.

Satisfactory services during AMC period is defined as 95% uptime. In case 95% uptime is not provided the AMC period would be extendable by a period which is equivalent to the period during which 95% uptime was not provided.
Response Time : Should be four hours

Preventive Maintenance: Tenderers should provide at least one preventive maintenance service every month during the AMC period.

13. Training: Tenderers should provide free training on the complete operation and care of the equipment and Software Packages to be supplied on mutually agreed terms.

14. Validity of Tender: The quotations shall be valid for a minimum period of **One Hundred Eighty (180) days from the date of opening of tenders.**

15. Delivery: Equipment may be delivered between **10.00 A.M. to 04.00 P.M.** on all working days i.e. Monday to Friday at our Stores Section only.

16. Payment - Indigenous Supplier: Payment shall be made after delivery, satisfactory installation, testing, commissioning, demonstration and final acceptance of the ordered items by the user department, through an Account Payee cheque drawn on **State Bank of India, Hrapur Branch, Dhanbad-826 015 (Jharkhand)**, India within thirty (30) days from the date of submission of the bill. Bill(s) in triplicate duly pre-receipted with Rs.1/- revenue stamp will have to be presented for claiming payments.

17. Liquidated Damages: The LD clause of 01% per week subject to maximum 10% of the order value will be imposed on non-compliance of the order Terms & Conditions. The L.D may further be revised and enhanced as per the discretion of the Competent Authority, CIMFR on violation of the contractual terms of any form. Director, CIMFR reserves the right to go ahead with the procurement of ordered goods from any another vendor without giving any prior notice and cancel the purchase order. In such case, any additional impact on CIMFR over and above that contained in the Purchase Order shall be recovered from the successful vendor from the payment to be made by CIMFR or any of the CSIR Labs. to them towards earlier supplies, EMD or otherwise

18 S.T. Registration No./ITCC/Distributorship/Dealership/Service Provider Certificates:

Tenderers must attach a legible photocopy of the following documents positively along with their tenders.

- i) CST/Local Sales Tax Registration Certificate.
- ii) Latest Income Tax Clearance Certificate.
- iii) Authorised Distributorship/Authorised Dealership/Authorised Retailership/Authorised Service Provider Certificate from the manufacturers.

19. Environmental conditions for the installation of equipments: Tenderers should specify minimum environmental needs for installation of their Equipments such as air-conditioning specifications, power supply specifications including any special requirements like voltage regulators, etc.

20. Software installation: Tenderers should clearly specify the minimum hardware requirements for the installation of Software Packages positively.

21. Tenderers should note that they should offer their best products pertaining to Technical specifications given.

22. Tenderers should clearly indicate whether they are Original Equipment Manufacturers or authorized distributors/dealers/suppliers on behalf of manufacturers. Brand names & Model Nos. of all equipments and components offered should necessarily be mentioned.

23. Tenderers should furnish the experience of their organization in the area of manufacturing and/or supply of similar equipment.

24. Tenderers should have a well established Office and Service and Support Centre in Kolkata / Dhanbad, India, managed by qualified maintenance professionals along with documentary evidence to be attached with their tenders.

25. Tenderers should indicate the names (along with addresses, Telephone nos., Fax No., Contact person, dates of supply, etc.) of various Government, Public Sector Departments and other organizations where they have supplied and installed the similar equipments and are duly maintaining them.

26. Tenderers should furnish all details of Performance Certification/Bench marking of their Equipments by recognized National/International Institutes Govt. Organizations like D.O.E. (Dept of Electronics), etc as applicable.

27. All prices shall be quoted clearly both in figures and words duly taking into account all concessions provided by the Govt. of India as on the date of tender. In case of discrepancy in Unit and Total prices, unit price shall be taken to be final price for the purpose of calculations.

28. Tenders incorporating additional conditions are liable to be rejected.
29. Complete details including final specifications of the equipments offered/quoted should be furnished along with brochures/literature mentioning all features.
30. Tenderers should indicate whether they are the OEMs/. Authorised Distributors/Authorised Dealers/Authorised Retailer of the equipments offered and have valid license to sell Equipment.
31. Tenderers will also indemnify CIMFR against all possible damage due to any Copyright violation by them.
- 32 Only legal and authorised copy of Software Packages with all original manuals, installation and performance guide, etc. complete in all respects are required to be supplied.
33. Tenderers will replace equipments in toto, in case of any malfunctioning or other similar problems arise after supply of the equipment.
34. Equipment supplied will include all Operational and Maintenance Manuals, tutorials, reference manuals, installation and performance guide, etc. complete in all respects. Connecting cable and/or any other part/device which is essentially required for making the equipment operational is required to be supplied along with the equipment and n additional cost.
35. Printed conditions of the tenders shall not be binding on CIMFR.
36. CIMFR is an R&D organization under CSIR, Ministry of Science & Technology, Govt. of India. Therefore it is requested to **quote concessional rates applicable to the R&D organizations since the equipment is required for research purposes.**
37. Offers for stores vaguely described as "Best Indian Make", "Foreign Make" will be ignored while considering the tenders.
38. Details of Equipments supplied to CSIR Labs/Institutes: The tenderers who have supplied identical or similar equipment to other CSIR Labs/Institutions have to furnish the details of such supplies for the preceding three years along with the prices eventually or finally paid positively.
39. **Responsibility:** The responsibility lies with the successful tenderer, if any damage or loss to the property of the Institute occurs while undertaking and executing the contract.
40. **Shortage of Supplies:** Suppliers will have to make the good the shortages, if any, which is revealed after opening the packages. The Stores, which are spoiled/damaged during transit due to faulty packing will have to be replaced by the suppliers. The product should have warranty for workmanship, performance and service for a minimum period of twelve months from the date of acceptance of replacement of spares/parts during warranty period. The replacement should be done free of all costs including to and fro Air Freight, packing, forwarding and insurance charges.
41. **Defects and Liability Period:** Thirty six months from the date of virtual completion, installation and commissioning of the equipments as certified by CIMFR, Dhanbad, India.
42. **Damage and Unaccepted supply :** The material found to be damaged and declared rejected should be collected by you at your risks and costs within 21 days from the date of intimation by CIMFR, otherwise ground rent will be charged.
- In addition to the Terms and Conditions mentioned above, Terms and Conditions for the items offered from abroad are as follows:
43. The detailed specifications of the material offered should be given. Relevant technical Literature and descriptive catalogue / pamphlet should also be attached with the offer.
44. **FOB Price only to be indicated.** Other charges applicable to be indicated separately.

45. INSURANCE: Insurance will be done by our own means for imports. Please intimate immediately after shipment about the Airway Bill No. For indigenous items the cost must include the insurance charges.

Bill of Lading, consignment etc. to The Director, CIMFR, P.O + Dist: Dhanbad, Dhanbad, Jharkhand, India.

46. WARRANTY: Warranty period should be for a minimum period of **2 (two) years onsite comprehensive.**

47. COUNTRY OF ORIGIN: Please specify Place/County of Origin and the Place/Country from where goods will be finally shipped. These particulars are very important for establishment of Letter of Credit and arranging insurance.

48. VALIDITY PERIOD: Your offer should be valid for at least One Hundred Eighty (180) days from the date of opening of tenders.

49. Please also indicate names and addresses of some of the Indian Organizations to whom you have supplied material, if any, under reference.

50. This Institute is eligible for payment of concessional customs duty under OGL Scheme. Actual User-Condition (Non-industrial-R&D institution).

51. INDIAN AGENT'S COMMISSION: If you have any Agent in India, please indicate specifically whether the amount of agency commission payable to the agent is included in the FOB Price or not. Moreover, Indian Agent should have compulsory registration with DGS&D, Govt. of India (**wherever required on case to case basis**). Please note that the tender will not be considered if the Indian Agent is not Compulsorily registered with DGS&D, Govt. of India and Agency Commission will not be paid to the Indian Agent unless a legible photocopy of DGS&D Registration Certificate duly attested is submitted to this office. The Indian Agents Commission will be paid in Indian Rupees only within thirty days from the date of commissioning and final acceptance of the whole system by CIMFR, Dhanbad-828 108, India. The role played by the Indian Agents in rendering assistance to your customers may also be specified.

52. FREIGHT: The mode of dispatch should be Ocean Freight/Air Freight preferably by Air India Flight and on To-Pay basis only. Please indicate the approximate Air Freight Charges for Kolkata Air Port, India. The consignments are required to be shipped by Air India (Freight to pay) up to Kolkata Airport, India. All the documents are to be made in favour of Director, CIMFR, Dhanbad-826 001, India and forwarded to our Banker.

For speedy clearance, please specify our Purchase Order Reference No. and date on the top of the parcel as well as on the Airway bill without fail. Address all the consignments to **Director, CIMFR, Dhanbad-826 015**, India and not to Bank. The ordered materials are being imported under Open General License.

The following documents may be sent to us directly while dispatch.

Invoice in quadruplicate with deduction of Agency Commission, if any, Packing List, Delivery Challan, Country of Origin Certificate, Literature, if any, should be enclosed.

53. PAYMENT TERMS :

Term I - In case of indigenous orders, the payment will be on credit basis i.e. 100% after receipt of material in good condition, installation, testing, commissioning, satisfactory demonstration, final acceptance of the whole system and on submission of unconditional Performance Bank Guarantee for 10% of the total order value valid till 60 days after the warranty period from a Indian Scheduled Bank duly recognized by RBI.

Term II - In case of import orders, 80 percent value of goods will be paid through an Irrevocable Letter of Credit on submission of shipping documents. Balance 20 percent value of goods will be paid through L/C excluding Indian Agency Commission, if any, after installation, testing, commissioning, satisfactory demonstration, final acceptance of the whole system and on submission of unconditional Performance Bank Guarantee for 10% of the total order value valid till 60 days after the warranty period from a Foreign Bank duly endorsed by Nationalized Bank in India.

Term III - 100% payment after satisfactory installation & commissioning of the equipment if it is to be supplied for the first time in India or otherwise if the party does not have successful installation in India, against submission of unconditional Performance Bank Guarantee for 10% of the total order value within twenty one (21) days of the placement of Purchase Order valid till 60 days after the warranty period from a Foreign Bank duly endorsed by Nationalized Bank in India. Director, CIMFR reserves the right to change the payment terms at his discretion from case to case basis depending on the merit of the case.

54. The tenders are liable to be cancelled if any of the conditions noted herein are not complied with. Hypothetical, ambiguous and conditional tenders will not be entertained at all and rejected summarily.

55. Goods should not be dispatched until firm Purchase Order is received by the successful vendor.

56. Director, CIMFR reserves the right to delete or alter the item given in the enclosed annexure depending on prevailing requirements.

57. Director, CIMFR reserves the right to accept or reject any tender in completely or in part thereof without assigning any reason.

58. Arbitration :

Except where otherwise provided in the Contract, all questions and disputes relating to the meaning of the specifications, instructions and terms & conditions herein before mentioned and as to the quality of the materials, as to any question, claim, right, matter or thing whatsoever, in any way arising out of or relating to the Contract. Specifications, estimates, instructions, orders

or these conditions or otherwise concerning the works, or the execution of the same whether arising during the process of the work or after the completion or abandonment thereof shall be **referred to the sole arbitration of a person nominated by the Director General, Council of Scientific & Industrial Research, New Delhi**, and if he is unable or unwilling to act to the sole arbitration of some other person appointed by him willing to act as such arbitrator. The submission shall be deemed to be submission to Arbitration under the meaning of the India Arbitration & Conciliation, 1996 or any satisfactory modification or reenactment thereof for the time being in force conclusive and binding on all parties of the Contract. **The venue of the arbitration will be Dhanbad only.**

In the case of a dispute between the purchaser and a foreign supplier, the dispute shall be settled by arbitration in accordance with provision of clause above. But if this not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission of International Trade Law) Arbitration Rules. The venue of the arbitration shall be the place from where the order is issued.

SECTION - IV

FORMATS FOR BID SUBMISSION **Checklist for Bid Submission**

The following check-list must be filled in and submitted with the bid document:

Technical Bid:

1.	Has the tender document issued to you?	Yes / No
2.	Have you attached the technical bid form?	Yes / No
3.	Have you attached a copy of the last audited balance sheet of your firm?	Yes / No
4.	Have you attached proof of the manufacturer's authorization?	Yes / No
5.	Have you attached the details of the income tax registration and latest income tax clearance certificate?	Yes / No
6.	Have you attached the statement of deviations from the technical Specifications in the format?	Yes / No
7.	Have you provided details of your maintenance infrastructure facilities including addresses of the service centers in the format	Yes / No
8.	Have you attached the technical details of the goods and services offered as a part of this bid document?	Yes / No
9.	Have you attached the copies of relevant work orders executed during the last three years?	Yes / No
10.	Have you attached the details of identical or similar equipments supplied to other CSIR Labs/Institutes for the preceding three years together with prices eventually or finally paid?	Yes / No
11.	Have you attached photocopy duly attested of Certificate of compulsory Enlistment of Indian Agents of foreign principals with DGS&D if quoting on their behalf? Date of enlistment must be before the date of opening of tenders.	Yes / No
12.	Have you attached Service Provider Certificate issued by the Manufacturer?	Yes / No

Financial Bid:

1.	Have you attached the Financial Bid?	Yes / No
2.	Have you attached the price schedule for the goods/services offered in the Format?	Yes / No
3.	Have you attached the statement of deviations from the Financial terms and conditions in the format?	Yes / No

Please arrange your tender document for each part as given below:

Earnest Money Deposit :

TECHNICAL BID:

Technical Bid Form

Copy of the Last Audited Balance Sheet of the company

Income Tax Registration Certificate/PAN No.and latest Income Tax Clearance Certificate

Proof of Manufacturer's authorization

Photocopy of Warranty Service Provider Agreement between the manufacturer and the Service Provider.

Statement of Deviation from the technical specifications

Details of service centers at Dhanbad

Photocopy duly attested of Certificate of compulsory enlistment of Indian Agents of foreign principals with DGS&D if quoting on their behalf. Date of enlistment must be before the date of opening of tenders?

Copies of relevant work orders

Details of supplies of identical or similar equipment made to other CSIR Labs/Institutions for the preceding three years together with price eventually or finally paid.

FINANCIAL BID:

Financial Bid Form

Estimated quantity and Financial Bid Analysis

Statement of Deviations from Financial terms and conditions

Technical Bid Form

(To be submitted on the firm's Letter Head and signed by an authorized person)

To ,
The Director
Central Institute of Mining & Fuel Research
P.O. DHANBAD Barwa Road,
DHANBAD – 826015, Jharkhand,INDIA

Ref: Tender No.CIMFR/PUR/14(3)2009 dt.27.11.2009.

Sir,

Having examined the bidding documents, the receipt of which is hereby duly acknowledged, we, the undersigned offer to supply and deliver goods as per the schedule of requirements and in conformity with the said bidding documents. We undertake, if our bid is accepted, to deliver the goods in accordance with the delivery schedule specified in the bidding documents.

If our bid is accepted, we will submit a unconditional performance bank guarantee for the sum equivalent to 10% of the Contract Price i.e. Total Order Value for the due performance of the Contract, in the form prescribed by the Central Institute of Mining & Fuel Research, Dhanbad.

We agree to abide by this bid for a period of One Hundred Twenty days after the date fixed for opening and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

We declare that we are the manufacturers/authorized agents/distributor of

1. that we/our principals are equipped with adequate machinery for production, quality control and testing of offered products manufactured/developed and used by us.

2. We hereby offer to supply the Goods/Services at the price at the rates mentioned in the Financial Bid.

3. We enclose herewith the complete Technical Bid as required by you. This includes:

Technical Bid Form

Copy of the last audited balance sheet of the company

Proof of Manufacturers authorization.

Technical details of the goods and services offered.

Statement of deviation from the technical specifications

Details of local service centers

Product catalogues/user manual/other informative material about our products and Services.

Details of supplies of identical or similar equipment to other CSIR Labs/Institutes for the preceding three years together with prices eventually or finally paid.

Photocopy duly attested of Certificate of compulsory enlistment of Indian Agents of Foreign principals with DGS&D if quoting on their behalf. Date of enlistment (It must be before the date of opening of tenders).

4. We have carefully read and understood the terms and conditions of the bid document and the conditions of the contract applicable to the bid document and we do hereby undertake to supply as per these terms and conditions.

5. Certificate that the bidder is:

A Sole proprietorship firm and the person signing the bid document is the sole proprietor/constituted attorney of the sole proprietor, or

A partnership firm, and the person signing bid document is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement/by virtue of general power of attorney, or

A company and the person signing the document is the constituted attorney.

(NOTE: Delete whatever is not applicable. All correction/deletions should invariable by duly attested by the person authorized to sign the bid document)

6. We do hereby undertake take, until a formal work order is prepared and executed, this bid, together with your written acceptance thereof and placement of letter of intent awarding the work order, shall constitute a binding contract between us.

Dated this day 2004 Signature of Bidder

Details of enclosures.

Full Address _____

Telephone No. _____

Telegraphic Address: _____

Fax No _____

E-Mail _____

COMPANY SEAL

**STATEMENT OF DEVIATIONS FROM TECHNICAL SPECIFICATIONS AND
SCHEDULE OF REQUIREMENTS**

Following are the Technical deviations and variations from the Technical specifications and Schedule of Requirements. These deviations and variations are exhaustive. Except these deviations and variations, the entire work shall be performed as per your specifications and documents.

SI No.	Item	Statement of Deviations / Variations

Signature of the Bidder

Name:

Date:

Place:

Address:

Company Seal

**MAINTENANCE INFRASTRUCTURE FACILITIES INCLUDING ADDRESSES OF
THE LOCAL SERVICES CENTRES**

LOCATION	ADDRESS OF SERVICE CENTRE	NAME OF THE CONTACT PERSON WITH TEL. No. Fax No. and Email	Total No. of qualified service engineers	Remarks

Signature of the Bidder

Name:

Date:

Place:

Address:

Company Seal

Financial Bid Form

(On the Letter Head of the firm submitting the Bid Document)

**To ,
The Director
Central Institute of Mining & Fuel Research
P.O. DHANBAD Barwa Road,
DHANBAD – 826015, Jharkhand,INDIA**

Ref: Tender No.CIMFR/PUR/14(3)2009 dt.27.11.2009.

Sir,

Having examined the bidding documents and having submitted the technical bid for the same, we, the undersigned, hereby submit the Financial Bid for supply of goods and services as per the schedule of requirements and in conformity with the said bidding documents.

We hereby offer to supply the Goods/Services at the prices and rates mentioned in the Financial Bid.

We do hereby undertake that, in the event of acceptance of our bid, the supply of Goods/Services shall be made as stipulated in the schedule to the Bid document and that we shall perform all the incidental services.

The prices quoted are inclusive of all charges including installation and commissioning charges in the Central Institute of Mining & Fuel Research Institute, Dhanbad.

We enclose herewith the complete Financial Bid as required by you. This includes:

Financial Bid Letter

Price Schedule

Statement of deviations from Financial terms and conditions.

We agree to abide by our offer for a period of One Hundred Twenty (120) days from the date fixed for opening of the bid documents and that we shall remain bound by a communication of acceptance within that time.

We have carefully read and understood the terms and condition of the bid document and we do hereby undertake to supply as per these terms and conditions. The Financial Deviation are only those mentioned in the statement of deviation from financial terms and conditions.

Certified that the bidder is:

A sole proprietorship firm and the person signing the bid document is the sole proprietor/constituted attorney of sole proprietor.

Or

A partnership firm and the person signing the bid document is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement/by virtue of general power of attorney.

Or

A company and signing the bid document is the constituted attorney.

(Note: Delete whatever is not applicable. All corrections/deletions should invariably be duly attested by the person authorized to sign the bid document).

We do hereby undertake, that until a formal work order is prepared and executed, this bid, together with your written acceptance thereof and placement of letter of intent awarding the work order, shall constitute a binding contract between us.

Dated this day of _____ Signature of Bidder

Details of enclosures

Full Address:

Telephone No.

Telegraphic Address:

E-mail:

COMPANY SEAL

PRICE SCHEDULE - Estimated Quantity and Financial Bid Analysis

Sl No	Item Name	Qty.	Manufacturer	Model Name & Version	Compliance to suggested Technical Specification	Operating System Environment	Unit Cost Rs.	Total cost (inclusive of all other charges)

1. Attach sheet giving detailed Technical Specification and deviations for the suggested systems.

NOTE

- (i) For Financial bid comparison total Value in Col. No. 9 shall be the basis.
- (ii) Unit value quoted in actual quantity of work shall form the basis.
- (iii) The Bid should have Col. 3 x Col. 8 = Col.9. Any error in the Table of any bidder is liable to be out rightly rejected.
- (iv) The price quoted should be inclusive of all charges including all applicable taxes, Octroi, freight and handling charges, and all other miscellaneous expenses.
- (v) In case of discrepancy between unit price and total price, the unit price will prevail.
- (vi) Annual Maintenance Charges after warranty period should be quoted separately.

Signature of the bidder

Name :

Place :

Date :

Address :

Company Seal

STATEMENT OF FINANCIAL DEVIATIONS

Following are the financial deviations and variation(s) from the exceptions to the specifications and documents for the Bid document. These deviation(s) and variation(s) are exhaustive.

Except these deviation(s) and variation(s), the entire work shall be performed as per your specifications and documents.

SI No.	Section No.	Clause No.	Statement of Deviations / Variations

S. No. Section No. Clause No. Statement of deviation(s) and variation(s)

Signature of the bidder

Name:

Place:

Date:

Address:

Company Seal

BID SECURITY FORM

WHEREAS
(hereinafter called "the Bidder") has submitted its bid dated(Date of submission of bid) for the supply of(Name and/or description of the goods)
(Hereinafter called "the bid").

KNOW ALL PEOPLE by these presents that WE(Name of bank) of (Name of country), having our registered office at (address & phone & fax no. of bank) (hereinafter called "the bank"), are bound unto (Name of Purchaser) (hereinafter called "the Purchaser") in the sum of For which payment well and truly to be made to the said purchaser, the Bank binds itself, its successors, and assigns by these presents, Sealed with the common Seal of the said Bank this Day of 200.....

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form; or
2. If the Bidder, having been notified of the acceptance of its bid by the Purchaser During the period of bid validity:
 - a) Fails or refuses to execute the Contract Form if required; or
 - b) Fails or refuses to furnish the performance security, in accordance with Instruction to Bidders.

We undertake to pay the purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is owing to it, owing to the occurrence or one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee shall remain in force up to and including 180 (One Hundred Eighty) days after the period of the bid validity, and any demand in respect thereof should reach the Bank not later than the above date.

PERFORMANCE SECURITY FORM

To: _____ (Name of Purchaser)
WHEREAS _____ (Name of Supplier) hereinafter called "the Supplier" has undertaken, in pursuance of Contract No. _____ dated _____ 2007 to supply _____ (Description of Goods and Services) hereinafter called "the Order" AND WHEREAS it has been stipulated by you in the said order that the Supplier shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with the Supplier's performance obligations in accordance with the order.

AND WHEREAS we have agreed to give the Supplier a Guarantee:
THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of _____ (Amount of the Guarantee in Words and Figures) and we undertake to pay you, upon your first written demand declaring the sum or sums within the limit of _____ (Amount Guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the _____ day of _____

Signature and Seal of Guarantors

Date

Address

All correspondence with reference to this guarantee shall be made at the following address:

(Name & address of the lab)

*****THE END*****
