



KIOCL LIMITED.

(A Government of India Enterprise)
II Block, Koramangala, BANGALORE 560 034.
(An ISO 9001 & ISO 14001 Company)
Phone No. 080-25532168 / 25531150,
Fax: 080-25532153 / 25535941.

OPEN TENDER NOTICE

No. TS/PROJ/690

Date: 17-07-2009

KIOCL Limited invites sealed bids from reputed contractors for Strengthening of Filter Plant building in KIOCL Limited, Panambur, Mangalore, Karnataka state.

The tender details are available in our website www.kudremukhore.co.in. Bidders can collect the tender documents on all working days from the office of the DGM (CP&TS), KIOCL Limited, Bangalore OR from the office of the Sr. Manager (Proj &PC), Contract Section, Project Dept., KIOCL Limited, Panambur, Mangalore – 575 010 from 17.07.2009, 10.00 AM till 20.08.2009, 3.00 PM or the same can also be down loaded from our website.

A pre bid meeting is scheduled on 27.07.2009, 11.00 AM at the office of the Additional General Manager (Production), Pellet Plant, KIOCL Limited, Panambur, Mangalore – 575 010 for related clarifications. The last date for submission of sealed bid is 21.08.2009, 3.00 PM.

KIOCL Limited reserves the right to reject any or all the bids without assigning any reasons whatsoever.

Dy. General Manager (CP & TS)



KUDREMUKH

ISO 9001:2000,
ISO 14001:2004 &
OHSAS 18001:1999 COMPANY

KIOCL LIMITED

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No. TS/PROJ/690

Dt. 17.07.2009

OPEN TENDER NOTICE

Sub: Strengthening of Filter Plant building in KIOCL Limited, Panambur, Mangalore

KIOCL Limited invites sealed tenders from experienced Contractors who have carried out similar type of work and also *having Provident Fund & ESI code number issued by respective authorities* for the below mentioned work. Tender papers can be had from the office of the undersigned on all working days during the office hours till 15.00 Hrs on 20.08.2009 on payment of Rs.1000.00 per set (inclusive of Sales Tax) in the form of D.D drawn in favour of KIOCL Limited, Bangalore – 560 034 or payment in cash at KIOCL Limited, Bangalore / Mangalore Cash Counter in all working days. If the tender documents downloaded from website www.kudremukhore.co.in, the DD towards cost of tender document should be furnished along with technical bid. The last date for submission of tender is till 15.00 Hrs on 21.08.2009.

Name of the work: Strengthening of Filter Plant building in KIOCL Limited, Panambur, Mangalore.

EMD: Rs. 50,000/- (Rupees Fifty Thousand only) in the form of DD drawn in favour of KIOCL Limited, Bangalore – 560 034.

Pre Bid Meeting: A pre bid meeting has been scheduled to be held on 27-07- 2009, 11.00 AM at the office of the Additional General Manager (Production), Pellet Plant, KIOCL Limited, Panambur, Mangalore 575 010, for related clarifications. Bidders are requested to confirm in advance of their participation in the pre-bid meeting.

Issue of Tender Document: From 17.07.2009, 10.00 AM to 20.08.2009, 15.00 Hours on all working days, the tender documents will be issued at the office of Dy. General Manager (CP&TS), Technical Services, KIOCL Limited, II Block, Koramangala, Bangalore – 560 034 OR at the office of the Sr. Manager (Proj&PC), Contract Section, Project Dept., KIOCL Limited, Panambur, Mangalore - 575 010 on payment of Rs. 1000.00 per set (inclusive of Sales Tax) in the form of D.D drawn in favour of KIOCL Limited, Bangalore – 560 034 or payment in cash at KIOCL Limited, Bangalore / Mangalore Cash Counter.

Last date for receipt of Bids: Sealed bids shall be received upto 15.00 Hrs. on 21.08.2009 at the office of the Dy. General Manager (CP&TS), Technical Services, KIOCL Limited, II Block, Koramangala, Bangalore – 560 034 OR at the office of the Sr. Manager (Proj & PC), Contract Section, Project Dept., KIOCL Limited, Panambur, Mangalore - 575 010.

(N.S. Jeyakumar)
Dy. General Manager (CP&TS)



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Dated. 17.07.2009

Dear Sir,

Sub: Strengthening of Filter Plant building in KIOCL Limited, Panambur, Mangalore

Please find enclosed herewith the tender documents for

- (i) **Technical Bid** - comprising of Proforma for Technical evaluation, Invitation for tender, instructions to tenderers, terms & conditions, Special conditions of contract, Technical specifications for Painting works and
- (ii) Documents for **Price bid** comprising of Schedule of Work.

The Technical bid along with other documents shall also contain proforma for Technical evaluation, which shall be duly filled in. The price bids of only technically qualified bidders shall be opened and others will be rejected.

KIOCL's decision on Technical evaluation shall be final and no correspondence shall be entertained in this regard.

Thanking you,

Yours faithfully,
For KIOCL LIMITED

(N.S. Jeyakumar)
Dy. General Manager (CP&TS)

Encl: As above.



KIOCL LIMITED

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PROFORMA FOR TECHNICAL EVALUATION OF BIDDERS

The agencies who are sending their offer must furnish following details along with documentary evidence.

General:

Name of the Agency	Postal Address	Communication Address	Contact Person/s	Emergency contact No

Specific for the work

Sl.No.	Description	Minimum Required
1.	Turnover during the last five years & highest value of similar work executed in the last five year (i.e, 2003-2004 onwards). Similar work means Sheeting work / Steel Structural work/steel structures painting work carried out in Process Plants/Industries. <i>Note: For works carried out in KIOCL Ltd., Mangalore, copy of work order/s should be enclosed and for works carried out in other areas work order/s along with work done / completion certificate/s should be enclosed.</i>	(i) Minimum turn over in any one year out of the five years should be not less than Rs.40.00 lakhs. (ii) Should have executed at least one similar work not less than Rs.16 lakhs under single work order OR two similar works not less than Rs.12 lakhs each.
2.	Provident Fund Account No. (mandatory)	
3.	Income Tax PAN No.	
4.	ESI No. (mandatory)	
5.	Service Tax Registration No.	
6.	TIN No.	

Signature & Seal of the Bidder

KIOCL LIMITED

(A Govt. of India Enterprise)

II Block, Koramangal,

BANGALORE – 560 034.

No.TS/PROJ/690

Dt. 17.07.2009

INVITATION TO TENDER

Dear Sir(s)

Sub: Tender for strengthening of Filter Plant building at KIOCL Limited,
Panambur, Mangalore.

1. Bid documents for the above work are enclosed herewith.
2. Sealed bids will be received upto 15.00 Hrs. on 21.08.2009 at the office of the Dy. General Manager (CP&TS), Technical Services, KIOCL Limited, II Block, Koramangala, Bangalore – 560 034 OR at the office of the Sr. Manager (Proj&PC), Contract Section, Project Dept., KIOCL Limited, Panambur, Mangalore - 575 010. Bids received late are liable for rejection.
3. Bidders shall abide by all the details given in “Instruction to Bidders” enclosed with the tender documents. The sealed bids shall be submitted in two separate sealed covers – (1) Technical bid and (2) Price Bid and each sealed bids shall be superscribed with the respective subjects and shall be addressed to Dy. General Manager (CP&TS), KIOCL Limited, II Block, Koramangala, Bangalore – 560 034.
4. The Technical Bid shall be accompanied by an Earnest Money Deposit (EMD) of Rs.50,000/- (Rupees Fifty Thousand only) to be deposited in the form of a Demand Draft from a Scheduled / National Bank drawn in favour of KIOCL Ltd., Bangalore.
5. EMD shall be adjusted to the Security Deposit in the case of successful bidder. However, the same shall be returned to the unsuccessful bidders immediately after the award of work to successful bidder.
6. Acceptance of the bid will be intimated to successful bidder through a letter enclosing the copies of the Letter of Intent (LOI) and this letter will be treated as authorization for award of work. The bidder shall sign the said copies of LOI and send to the owner. In the event of failure on the part of the bidder to sign and return the LOI, the EMD shall be liable to be forfeited at the sole discretion of the owner.
7. The time of completion of all works under this contract shall be FIVE MONTHS from the date of issue of Letter of Intent.
8. The successful bidder shall be required to execute an agreement within the time specified in the Letter of Intent.
9. The Company reserves the right to reject any or all the tenders without assigning any reason.

Thanking you,

Yours faithfully,
for KIOCL LIMITED

Encl: Bid documents.

Dy. General Manager (CP&TS)

A. INSTRUCTION TO TENDERERS

1. Tenderers have to acquaint themselves with the conditions prevailing at site, before submitting the tenders.
2. Tenderers shall furnish their quotation in the 'Schedule of Work' enclosed to the Price-bid documents (Annexure – H). Quotations should be written in both words and figures.
3. KIOCL reserves the right to reject any or all tender without assigning any reason.
4. KIOCL reserves the right to award the entire work or part of the work, as may be considered necessary.
5. Tenders received late are liable for rejection.
6. Tenders submitted without EMD will not be considered.

B. TERMS AND CONDITIONS

1. The work shall generally be governed by KIOCL Limited's General Conditions of Contract which is available in company website www.kudremukhore.co.in for reference and also available in the office of Dy. General Manager (CP&TS), Bangalore OR in the office of Sr. Manager (Proj & PC), Mangalore on all working days.
2. Scope of work in this contract broadly covers the following.
 - (a) As per Special conditions of contract
3. The quantities given in the schedule of items are approximate and may vary, some of the items may or may not be executed. No claim by the contractor on account of variations, omissions and modifications will be entertained.
4. No escalation is admissible on any account whatsoever till the completion of the work.
5. Mode of measurements for the work shall be as per IS-1200 latest edition unless otherwise specified for items not covered in IS-1200, CPWD standard shall be adopted.
6. Rates quoted against schedule items shall include all materials, labour, machinery expenses and hire charges, all taxes (except service tax), royalties, transport, maintenance incidents, enabling works etc, based on the conditions mentioned herein. Unless otherwise specified in the tender schedule the rates for all items will be deemed to include all leads, lifts and decent in the work.
7. The work executed shall be maintained in a good condition for a period of **SIX MONTHS** for Sheeting & Strengthening of steel structures and **FIVE YEARS** for Painting work, from the date of completion including repair required if any at contractor's cost. If the contractor fails to fulfill his obligation during the maintenance period, the same shall be got done by the owner at contractor's risk and cost.

8. (a) 10% of the value of work shall be deducted and retained till the completion of maintenance period as applicable.
(b) Initial Security Deposit of 3% of the value of work shall be adjusted against EMD immediately after the placement of order. The balance 7% shall be recovered from each running bill. The Security Deposit shall be refunded after successful completion of maintenance period.
9. Any damage to the company's property caused by the contractor during the execution / maintenance of work, shall be charged to the contractor and the amount of damage shall be left to the sole discretion of the Engineer.
10. Statutory deduction towards all applicable taxes shall be made as per rules.
11. Royalties if any for materials applicable shall have to be paid by the contractor.
12. All safety appliances like safety belt, helmets etc. have to be provided by the contractor to all his workers and supervisors. Workmen without necessary safety appliances shall not be allowed to work inside the plant premises and also at heights.
13. The contractor should obtain Insurance Policy to cover the risk of the labourers under Workmen Compensation Act and should be produced before starting the work.
14. Contractor should produce the PF code number and ESI code number obtained from the respective authorities along with the technical bid.
15. The contractor and his workmen may avail the facilities provided in the canteen set up for the contract labour. They will not be allowed to avail the facilities set up for KIOCL Limited employees.
16. Time of completion and Liquidated Damages:

The entire work under this Contract shall be completed within FIVE MONTHS from the date of issue of LOI. If the contractor fails to complete the work within the stipulated completion time, the contractor shall pay to owner as liquidated damages for such default, for every day which shall elapse between the date prescribed thereof and the actual date of completion of the scope of work, the amounts determined on the basis of the percentage of the value of the work as specified herein.

Delay of 1st 20 days 0.1% per day of the total contract value.

Delay of next 20 days 0.15% per day of the total contract value.

Subject to a maximum of 5% of the total CONTRACT VALUE.

KIOCL reserves the right to waive the liquidated damages either in part or in full at his sole discretion.

17. KIOCL comes under Factories Act, Rules, Regulations, byelaws and orders made thereunder. Hence the Contractors must abide by the same.

- (i) No persons shall be employed without Initial Training on Safety as per vocational Training Rules.
 - (ii) Contractor must immediately after deploying the Contract Workers, get their Initial Medical Examination done at Company Hospital/Company recognised Hospital. The expenditure towards Medical Examination of Contract Workers shall be borne by KIOCL Limited.
 - (iii) Sufficient nos. of Site In-Charge & Supervisors with experience should be deployed to ensure that the contract workers work safely and in accordance with all the provisions of Factories Act, Rules, Regulations, Byelaws and orders made there under.
18. The Contractor shall be responsible for all the safety measures as per the rules in the interest of safety of all the labourers working under him. Necessary safety appliances shall be provided to all the labourers at Contractor's cost.

Wherever it is observed that the contractor has not provided safety appliances to the workers engaged by him, the Management reserves the right to issue the necessary safety appliances to his workers on cost recoverable basis.

19. OBLIGATIONS OF THE AGENCY/CONTRACTOR WITH REGARD TO STATUTES:

The Agency shall be solely responsible as regards salary, wages and service conditions and terms extended by the Agency to his employees/workmen and shall in that connection maintain requisite records and comply with all laws, enactment, rules and regulations and orders dealing with employment of contract labour, payment of workmen's compensation, contribution under ESI Act, 1948 and PF/EPF Act 1952, payment of minimum wages, payment of bonus, fire and safety regulations, regulations relating to employment of female workforce, security requirements and such other and regulations as may be applicable. The wages prescribed by the appropriate Government under the Minimum Wages Act, 1948 and all provisions of the Contract Labour Regulation Act and Factories Act shall be complied with by the Agency. Agency shall insure all employees for accidents and third party losses and produce the policy before commencement of Contract. All employees of the Agency shall be covered under Workmen Compensation Insurance and Group Accident Insurance cover, by the Agency.

20. INDEMNIFICATION:

The Agency shall indemnify and keep indemnified the Company from and against all actions, claims, demands and/or liabilities whatsoever arising out of this agreement or consequent upon breach of any of provisions of this agreement and/or against any claim, action or demand by any of the Agency's Employees, person(s), firms, institutions under any law, rule or regulation having the force of law, including but not limited to, claims against the Company under Workmen's Compensation Act, 1923. The Employees State Insurance Act, the Employees Provident Fund Act, 1952, The Contract Labour (Abolition & Regulation) Act, 1970 and the Minimum Wages Act, 1948 and any amendments thereto.

21. The bids shall be valid for a period of three months from the due date of submission of the bid.

Signature & Seal of the Bidder

SPECIAL CONDITIONS

1.0 SCOPE OF WORK FOR STRENGTHENING:

- 1.01 The scope of work is as brought out in the schedule of work. The main objective of this contract is for dismantling of existing rusted/corroded steel structures like purlins, cleats, etc., cladding of Filter Building and strengthening/modification/rectification by cutting, cleaning the members fitment (alignment) of various sections, for steel structures wherever required and at heights of (+)21.10mtr to (+) 30.60mtr of Filter Building of Port Facilities, in KIOCL Limited, Panambur, Mangalore.
- 1.02 It is the responsibility of the contractor to employ suitable and experienced workmen for carrying out modification/rectification/ strengthening of steel structures with sufficient qualified site in-charge and supervisors for overall supervision at site on day-to-day basis.
- 1.03 Contractor should deploy experienced, skilled and adequate manpower for the above work in time and coordinate with painting contractor at the same time.
- 1.04 Contractor has to mobilize the equipments, men and materials place to place as necessity/priority arises for the execution of above job, at different locations and heights.
- 1.05 Welding electrodes like 6013 of make Advani, Orlicon, ESAB, D & H or any other reputed make shall be used for the above work with the prior approval of the Engineer- in- Charge. Minimum welding thickness shall be 6mm thick unless and otherwise specified.

2.0 SCOPE OF WORK FOR PAINTING WORK:

- 2.01 Preparation of old painted structural steel surfaces of roof (purlins, cleats) at an elevation (+) 21.10mtr to (+) 30.60mtr. in roof of Filter Building of Port Facilities, KIOCL, Panambur, Mangalore as per details given in the technical specification and as per instructions of Engineer in charge.
- 2.02 Supply and application of paints, compatible with existing paints according to the scheme enclosed at Annexure - F.
- 2.03 The contractor shall be responsible for the supply of paints in time for the timely execution and completion of the job.
- 3.00 Bidders shall visit and acquaint themselves with the Plant working conditions, Site conditions and other related aspects with reference to the Scope of work involved for each work. They are advised to discuss and fully acquaint with the nature of work, terms and conditions with the Engineer-in-charge before submitting the tender.

4.00 In addition to what has been described in the Schedule, Scope under this Tender includes all such works directly connected with the operation of Schedule items.

5.00 **Mode of measurement:**

5.01 For item nos. (1) for the purpose of measurement and payment, each sheet replaced shall be measured individually in terms of square area and paid accordingly (no deductions shall be made for overlap).

5.02 For item nos. (2) & (3) the basis of payment for the items will be in tonnage basis. The dismantled materials to be weighed in KIOCL weigh bridge and weighment slip to be obtained. This will form the basis for payment. The payment for modification/rectification/strengthening works executed will be on Tonnage basis as per the site measurement/ sketches given by M/s MECON Limited.

5.03 For item no. (4) & (5) the mode of measurement for painting shall be on the basis of tonnage of steel structural buildings based on DODL / the tonnage of erected steel structures as certified for payment by Engineer in charge (based on the measurements recorded in measurement books). Decision of Engineer in this regard is final and binding. Or otherwise, the joint measurement of the structures will be taken at site and will form the basis of payment. For embedded structures in concrete or at junctions no deduction will be made in the tonnage.

5.04 **Paint Film thickness**

- a) Film thickness shall be measured with ELCO METER.
- b) Thickness of existing paints after surface preparation and before application of primer coat of paint shall be measured.
- c) The film thickness shall be measured for each coat of paint.
- d) The number and position of measurements shall be determined by Engineer with due consideration to the size and shape of steel structural sections to be painted.
- e) Measurement shall be carried out three times at each measuring point in the area of about 1.00 Sq.M. The average of three measurements shall be taken as the measured value of the concerned steel structure.

The variation in film thickness shall be plus or minus five percent on the overall thickness as per Clause No.1.01 of Technical Specification.

6.00 **Workmanship**

6.01 The workmanship shall be as per standard. New holes wherever required shall be **drilled** (not punched) to suit the dia of the bolt supplied. However in exceptional cases punching will be permitted wherever drilling is not possible. The existing holes, which are found distorted and expanded, shall be covered with the patch of AC/CGI sheets in which necessary hole for bolt shall be drilled. All nuts with plate/bitumen washers shall be properly fixed and tightened.

6.02 While replacing the rusted AC/CGI sheets in cladding, care shall be taken to provide necessary laps with adjacent good sheets with proper mitering of sheets wherever required.

After placing the new sheet(s), all the bolts including the old serviceable bolts of the adjoining sheets shall be tightened fully.

6.03 Wherever MS flat wind ties are encountered, the same shall be removed while doing the work and refixed while replacement of bolts or sheets. The rates quoted by Contractor are deemed to include for this work as well.

7.00 **Safety precaution**

7.01 The nature of work is in the sloped roof of a big span shed. Contractor shall provide all tools and tackles necessary for the execution of work. Contractor shall provide for all safety appliances including safety belts/shoes/helmets goggles etc. Workers found with inadequate safety measures shall not be allowed to work.

7.02 Since the work is at heights, it is imperative on the part of the contractor that a qualified and experienced supervisor shall be posted at each site of work to avoid any accidents due to haphazard manner of workman ship by the workmen or spreading of cut pieces of steel structures, bits of welding electrodes, GI "J" bolts inside the Filter Plant building, as these will damage the equipment and hamper the process.

7.03 Each day's work shall be complete in itself i.e. work with half completion; half fixation of sheets/bolts/nuts is strictly forbidden. Fixing of new sheets shall be taken up in a "Stepping stage wise" manner and shall not be attempted haphazardly.

7.04 Taking up the sheets or lowering the sheets shall be done by means of rope.

7.05 Bolts/nuts/washers drawn from owner shall be properly accounted and care shall be taken not to drop the bolts/nuts/washers down. Each and every new bolt shall be physically checked at site after fixing for accounting and for any discrepancy in the quantity, the same shall be deducted from contractor's bill.

7.06 Lifting/taking up the steel sections/lowering rusted steel members shall be done by means of rope and with proper knot and they shall not be dropped down by allowing the section to slide.

8.0 Contractor shall visit the site of work to acquaint himself with location, type/nature of work involved, plant working conditions, site conditions available and other environments and related aspects prevailing in plant area which are contingent upon the scope of each work envisaged under this contract before submitting the tender. They are advised to discuss and fully acquaint with the type/nature of work, terms and conditions of the contract with the Engineer –in-charge before submitting the tender.

9.0 Site for office cum storage shed shall be provided free of cost by Owner. Contractor shall construct storage cum office structure in the location shown by owner within the plant area at his cost. No site for labour camp or accommodations shall be provided by owner.

10.0 Site of work is within the prohibited area. All entries/exits for men and materials shall be through the main gate only which is manned by Central Industrial security force staff.

Entry/gate passes duly countersigned by Owner are therefore required to be furnished at the main gate.

- 11.0 All materials brought to the site shall be properly safe guarded and protected against theft and weather conditions. Structural steel required for the work shall supplied by the owner for the above work to the contractor free of cost at central stores lay down area. Necessary progress report/ register should be maintained by the contractor for recording the day-to-day progress of work with relevant details, in the respective locations, steel issue/consumption and other work related items like strength of labour deployed, materials brought to site etc.
- 12.0 Contractor shall make his own arrangements for transporting the Owner supplied steel sections from KIOCL Limited stores/lay own area to the designated work spot.
- 13.0 All such materials issued/drawn from stores, shall be properly accounted for and reconcile after retrieving/salvaging the good materials if any, the balance scrap materials along with debris collected in gunny bags issued by owner free of cost, are returned to Owner's stores with Material return voucher in the Owners format. All other materials, consumables tools and tackles including welding transformer, junction box, electrical extension board with MCB, extension for power cable as may be required for this work shall be arranged by the contractor. After completion of the job the work site shall be cleaned / cleared in all respects.
- 14.0 Water required for the work shall be made available at one or two points, on free of cost basis depending upon the availability. Contractor has to make his own arrangements for distribution and storage.
- 15.0 Power/light point required for the work shall be made available at one point near Filter building area on free of cost. Contractor shall make his own arrangements for distribution lines. All equipments, welding transformers, tools and tackles including scaffoldings ladders and ropes required for the job shall be supplied and maintained in serviceable conditions by the contractor and strictly fulfill the structural requirements of tools and equipments. Since the work is to be under taken at great heights all necessary precautions required for safe guarding the men and equipments (Owners equipment) shall be ensured at all times during execution of the work.
- 16.0 General working hours on all weekly days except Sundays and holidays are from 8:30AM to 5:00 PM. Contractor has to deploy different groups to work round the clock for ensuring early completion of the work. Necessary special permission from Owner has to be obtained in writing before execution during beyond working hours, Sundays and holidays. Contractor should carryout the work in running plant. Further hot permits will be given for working in certain critical areas, whenever the front is ready in such places. Contractor shall ensure that the completion of work in such areas during the permitted period/shut down period itself, irrespective of timings.
- 17.0 Contractor should proceed with work in the area shown by Engineer-in-Charge as per the priority in coordination with the painting/structural/sheeting agencies, so that all the jobs progress simultaneously without hindrance. Accordingly the work schedule shall be sufficiently detailed to cover the manpower requirement and also tools / equipments / tackles and all materials that are proposed to be inducted in the work.

- 18.0 All materials brought to the site shall be properly safe guarded and protected against theft, fire hazard and weather conditions etc. Materials like paints, metal conditioning solutions, thinner and solvent/alkaline etc., shall be brought in sealed containers and the contractor shall maintain proper records/account of daily transaction.
- 19.0 All empty containers shall be the property of Contractor and shall be properly accounted for and shall not be removed from site till clearance is given by the Engineer.
- 20.0 As the work is to be undertaken in a running plant, all necessary precautions required for safeguarding men, material and equipments (Owner's) shall be ensured at all times during execution of the work.
- 21.0 Contractor shall furnish the owner a work/time schedule/bar chart upon issue of Letter of Indent (LOI) and indicating broadly regarding commencement and completion of the work within the time frame i.e. Five Months.
- 22.0 The Contractor shall offer the work carried out at every stage of painting for inspection and approval before proceeding with the next stage. Such approvals shall be entered in a register and got signed by the Engineer. Any defects noticed during the various stages of inspection shall be made good by contractor to the satisfaction of the Engineer before proceeding further. Irrespective of the inspection, repair and approval at every stage of work, the contractor shall be responsible for making good any defects found during guarantee period. The defects includes mitering, flaking or scaling, peeling of paint, pitting.
- 23.0 The thickness of dry film of paint applied shall not be less than the specified thickness.
- 24.0 **The contractor shall get approval for the colour and shade of the paint to be applied from the Engineer-in-Charge before arranging / procuring / manufacturing the paint.** The contractor shall intimate the owner in advance regarding the readiness of paints, which will be inspected by Inspection department of M/s. KIOCL Limited. Control tests as indicated under clause No. 1.03 of Technical Specification- for Painting Work (Annexure-E) shall be carried out on the samples for each batch of paints and test certificates shall be furnished.
- 25.0 Guarantee for the performance of the paint/painted surfaces shall be for a period of **five years** from the date of completion of the finishing coat of paint and for structural work shall be **six months** from the date of completion of the work. The work executed shall be maintained in good condition during the guarantee period, including repairs required if any at contractor's cost. If the Contractor fails to fulfill his obligation during the maintenance period specified, the same shall be got done through any other agency at contractor's risk and cost.
- 26.0 The Contractor shall provide suitable protection as necessary to prevent paint from splashing on the equipments, floors, walls etc. Any damage to owner's property caused by the contractor during the execution/maintenance of work, shall be charged to the contractor and amount to be deducted shall be decided at the sole discretion of the Engineer.
- 27.0 Any insects/ bee hives formed by honeybees or other insects, if found anywhere at work spot, shall have to be removed by the Contractor at their own cost.

- 28.0 Scaffolding wherever required shall be of material bamboo, casurina, and acrow staging / MS pipes.
- 29.0 TAXES & DUTIES: This clause shall be applicable not withstanding any other clause related to taxes & duties mentioned elsewhere in this tender document:
- i. The contract shall be deemed to a works contract and (property in the materials/equipments shall pass to the Owner only after their incorporation in the works and acceptance of the completed works by Engineer/Owner). Contractor's quoted rate shall be inclusive of all taxes and duties applicable for this work except service tax.
 - ii. The applicable service tax will be reimbursed on production of proof of remittance of Service Tax as per Rule 6(1) of Service Tax Rules for those contractors who do not have Service Tax Registration number.
 - iii. For contractors who are having Service Tax registration no., the Service tax will be paid extra based on claim of the contractor. However, the contractor shall produce a copy of half yearly return of Service tax filed at the office of the Superintendent of Central Excise. The final bill/SD will be released after production of the copy of half yearly return.

Signature & Seal of the Bidder

TECHNICAL SPECIFICATIONS - FOR PAINTING WORKS

1.0 PAINTING SPECIFICATION

1.01 This specification covers the general requirements for painting of steel structures of Filter Building of Port facilities as existing involving surface preparation, supply, testing, delivery of all painting material at site and application of paints at site including providing scaffolding as required, tools and tackles, equipment and labour for surface preparation and application of paints.

Painting test as indicated as per technical data at 1.03 and surface preparation to manual cleaning conforming to Swedish standard St-2 shall be adopted. Total DFT will be 300 microns for Filter Building of Port facilities and overall DFT of the system shall be within (+)/(-) 5% variation. KIOCL Limited's approved painting scheme is given in Annexure 'F' enclosed. Contractor shall adopt any one these specifications during execution of the work. However, in case contractor prefers to use any other scheme, such scheme shall be furnished along with full technical details along with the technical bid. KIOCL Limited reserves the right to accept or reject the scheme submitted by the contractor, which shall be final and binding on the contractor.

1.02 The contractor shall give performance guarantee of **five years** minimum for supply and application of proposed painting scheme. Performance Guarantee shall be furnished in KIOCL Limited's prescribed format, which is enclosed as Annexure -G.

1.03 Contractor at his own cost shall conduct the test for each batch of paint and shall submit test Certificates with following details.

- i) Description of product,
- ii) Mixing ratio
- iii) Volume solids by weight
- iv) Filling viscosity
- v) Pot life
- vi) Dry film thickness
- vii) Application method
- viii) Touch dry & hard dry
- ix) Over coating internal
- x) Colour shade
- xi) Finish
- xii) Adhesion/simulated salt spray
- xiii) Wear resistant

Contractor shall furnish test certificates for every batch of paints dispatched and brought to site as per specification. Before start of painting, clearance has to be obtained from Engineer in charge with regard to compliance of supplier. However KIOCL Limited reserve right to witness the testing of the paint at manufacturers work. All testing charges shall be to Contractors account.

2.0 SURFACE PREPARATION

- 2.01 Surfaces of old painted structural works, which are to be repainted, shall be thoroughly cleaned off loose scale, loose rust, loose paint, dirt, fines of iron ore, grease, oil and other foreign material by chipping, scraping, wire brushing, rubbing with abrasive paper/steel wool or any other suitable method to be offered by the contractor acceptable to owner. Workmanship shall generally conform to the requirements specified in IS: 1477 Part manual cleaning and shall conform to Swedish standard St-2.
- 2.02 The contractor where the other method specified above has not achieved the desired results shall resort to, cleaning by solvents. Cleaning with solvents shall be adopted only after obtaining approval of Engineer.
- 2.03 De-rusting and de-scaling by blasting is prohibited. Sand blasting is also not permitted. However air cleaning by compressor deployed by the contractor is permitted.
- 2.04 Surface preparation shall be examined / inspected by the Engineer and the contractor shall obtain a certificate from him stage wise to this effect before start of each coat painting.

3.0 PAINTING

- 3.01 All the paints shall be of quality product. The application of paint film shall serve the twin purpose of protecting the steel from corrosion and decorative appearance aesthetically.
- 3.02 Colour and shade for painting shall be decided upon after trial painting in small patches in consultation with and as directed by Engineer. Each coat shall have different **tint** (shade) to distinguish the same from the other.
- 3.03 Workmanship for painting shall generally conform to the requirements specified in IS 1477 Part-II.
- 3.04 An ELCOMETER shall be provided by the CONTRACTOR to the Engineer to measure the thickness of painting. The CONTRACTOR shall also furnish a latest certificate for the accuracy / calibration of the ELCOMETER. The thickness of the existing painting shall be measured after surface preparation and entered in a register/inspection certificate so that deducting the existing paint thickness can arrive at thickness of each coat of repainting.
- 3.05 Soon after the completion of surface preparation, primer coat of paint shall be applied with in shortest possible interval in order to prevent contamination of the surfaces in any way.
- 3.06 Application of primer and painting shall be by brush. However, in the exceptional cases, particularly junction between beams and columns and the like, where accessibility is a problem, spraying can be adopted for proper application and penetration of paint evenly to all the corners and spots. Contractor shall ensure proper and uniform dry film thickness (DFT) is achieved either by brush or spray application. Resorting to spray guns application shall be restricted to the barest minimum and shall be taken up only after obtaining clear

instructions from the Engineer. Sufficient over coating interval shall be allowed while the application of 2nd and third coat of paint.

- 4.01 The thickness of each coat of paint shall be measured by the ELCOMETER and shall be as per the thickness recommended by the contractor/MANUFACTURER. Thickness of each coat of paint applied shall be stage passed by ENGINEER.
- 4.02 Paint shall not be used after the date of expiry.
- 4.03 Paint shall be applied only after the contents of the drum have been thoroughly mixed.
- 4.04 Thinner (such as mineral turpentine) shall not be added to the paints unless the MANUFACTURER recommends it.
- 4.05 Painting operation should be carried out in a well-ventilated place, free from dust. Draughts and direct sunlight should be avoided, as it will result in a poor flow and a patchy finish. It is essential that the surface to be painted shall be dry, free from moisture or otherwise corrosion and other paint defects may result due to moisture getting trapped in the paint film. Correct timing for the application of the primer as well as other coats is important and shall be maintained.
- 4.06 In coastal regions and areas with moderate or high humidity with appreciable difference in day and night temperatures, it is generally not safe to paint exterior steel work early in the morning due to the settlement of dew on the surface. In such places painting should be taken up later in the morning after dew has evaporated. For the same reasons, painting during monsoon shall be avoided.
- 4.07 Wherever water dripping is observed due to the operational reasons, the CONTRACTOR shall intimate the ENGINEER in order to take advance action (about a week's time) to plug the leakage. The CONTRACTOR shall make all arrangements to make all the wet surfaces fit for painting which includes drying the area using blow lamps/hot air blowers, torch flame etc., wherever required, CONTRACTOR shall ensure the safety of existing electrical cables etc., from fire hazards and shall protect the dry area from dampness.

Signature & Seal of the Bidder

**KIOCL'S APPROVED PAINTING SCHEME FOR CORROSION
PROTECTION OF STEEL STRUCTURES.**

HEAVILY CORRODED STEEL STRUCTURES

Sl.No.	No. of coats	Type of paint to be used	No. of coat & film thickness in microns in DFT.
1	M/s. SHALIMAR PAINT LTD.		
	Primer Coat	Epiplus-556	1x125
	Intermediate coat	Epigard-5 HB MIO	1x125
	Finish Coat	Shalithane finish	1x50
		Total microns in DFT	300
2	M/s. AKZONOBEL		
	Primer Coat	Interseal -547	1x75
	Intermediate coat	Intergard – 475 HS MIO	2x90
	Finish Coat	Interthane – 138 Acrylic PU	1x45
		Total microns in DFT	300
3	M/s. BERGER PAINT LTD.		
	Primer Coat	Berger Protectomastic	1x125
	Intermediate coat	Epilux-455 HB MIO	1x100
	Finish Coat	Bergerthane – 41 SG Urethane paint	1x75
		Total microns in DFT	300
4	M/s. INTERNATIONAL PAINTS		
	Primer Coat	Interseal -574	1x75
	Intermediate coat	Intergard – 475 HB	2x90
	Finish Coat	Interthane – 990	1x45
		Total microns in DFT	300
5	M/s. KANSAI NEROLAC PAINTS LTD.		
	Primer Coat	Neromastic – 400	1x80
	Intermediate coat	Neropoxy – HB 6061	2x90
	Finish Coat	Nerothane – 460 GL	1x40
		Total microns in DFT	300

Note : Recommended painting scheme of corroded structures can be chosen from any one of the above.

PERFORMANCE GUARENTEE

M/s.
(the Guarantor) guarantees M/s. KIOCL Limited, Panambur, Mangalore –575010 having their Registered and Head office at II Block, Koramangala, Bangalore- 560 034 (the owner) as here under. –

The owner has awarded a contract No..... to the Contractor for painting of steel structures in the owner’s Plant at Panambur, Mangalore. The contractor hereby guarantees the satisfactory performance of the contract in all respects, the satisfactory performance of their painting system/painted surfaces for a period of **five years** from the date of completion of application of the finishing coat of paint subject to the following terms and conditions in addition to the clauses/conditions mentioned in the technical specifications and Special conditions of the contract.

- 1) The Guarantor’s obligation under this guarantee shall be to repair defective areas (as defined below) with paint and labour free of cost during the performance guarantee period of **five years**. “Defective areas” shall mean area/areas where the following defects are observed during the guarantee period.
 - i) Corrosion to bare metal.
 - ii) De-lamination of paint from the surface.
 - iii) Cracking of paints.
- 2) The guarantee shall commence on the date of completion of application of the finishing coat (final coat) of the painting system to each building/unit.
- 3) The defects shall be rectified by the Guarantor providing extra coat of new paint as deemed necessary, so as to match with the original and damaged paint after thoroughly cleaning the damaged portion as per specifications, instructions and directions of the Engineer. So that the repaired / repainted surface shall not show any defects as defined above within the guarantee period of FIVE YEARS.
- 4) The guarantor shall rectify the defects within three weeks from the date of receipt of the notice from the Owner giving brief details of the nature of the defects.
- 5) If the guarantor fails to perform his obligation as per this guarantee, KIOCL reserves the right to rectify the defects through another agency at guarantor’s risk and cost.
- 6) The guarantor shall have no liability under this guarantee for the following:
 - i) Deterioration of paint and damaged to the coating systems caused by accidents, welding or other heating, fire, explosion, mechanical action, severe micro – climates such as moisture ponding.

- ii) Deterioration of steel or the coating system caused by electro chemical action arising from the presence of metals which are cathodic to the metal of the guaranteed surfaces.
 - iii) Deterioration of the coating system caused by physical abuse.
 - iv) Loss/reduction in dry film thickness (DFT) and chalking due to ultra violet (UV) radiation.
 - v) Chalking / discolouration of finish paint.
- 7) Forge majeure vide Clause 55 of the General Conditions of Contract shall be applicable during the guarantee period also.
- 8) The Bank Guarantee of DD or cash for the 10% of the contract value shall be deposited with Owner valid for five years towards performance guarantee after completion of total works.

CONTRACTOR

ANNEXURE - H**SCHEDULE OF ITEMS**
(PRICE FORMAT)

Sl.No	Description of Work	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
1	Labour only for removal of old CGI/AC sheets of side cladding of Filter Plant building and replacing with owner issued new CGI/AC sheets including returning of old CGI/AC sheets to Stores department (CGI/AC sheets, bolts, nuts and washers to be supplied by KIOCL at main stores on free of cost) – all as per the instructions of Engineer-in-charge	Sq.M	200.00 (Two Hundred)		
2	Fabrication of any type of steel structures required for modification/ rectification/ strengthening of existing purlin and cleats (steel structures) etc. at Filter Plant building and CB 89 Conveyor approximately at an elevation of (+) 21.10 to 30.60mtr to be executed as per the sketches issued by M/s. MECON and cutting the required member at any location during execution of the work and cleaning the existing member for erection of the fabricated items at suitable locations with proper fitment at any heights and using Owner supplied steel, including transportation of materials from stores laydown area to the work spot at any lead and lift, cleaning and collection of debris in gunny bags and returning to stores, all necessary by-works required for modification / strengthening / rectification including providing all tools & tackles, consumables welding transformer etc. complete – all as per instructions of Engineer in charge.	MT	30.00 (Thirty)		
3	Dismantling of damaged/rusted purlins and cleats (steel structures) at Filter Plant building and CB 89 Conveyor, approximately at an elevation of (+) 21.10 to 30.60mtr and lowering by means of rope weighing the steel structures in KIOCL's weigh bridge and returning to KIOCL's stores with material return voucher in KIOCL's prescribed format, including making necessary arrangements for transportation of dismantled items, all tools, tackles and consumables, providing temporary supports for connected members etc., wherever required, using owner supplied steel etc complete – all as per the instructions of Engineer-in-charge.	MT	5.00 (Five)		

4	Preparation of old painted structural steel surfaces as existing at site approximately at an elevation of (+) 21.10 Mtr. to (+) 30.60 Mtr. elevation/ height or locations in Filter Plant building by mechanical/ manual methods of scraping and chipping to remove scales and blistering of paints conforming to ST-2, preparation of the surfaces and pits formed due to corrosion and followed by wire brushing and/or rubbing with abrasive paper/cloth/steel wool until the bare metal is thoroughly exposed or exposed suitably for painting and free from all scales, rust, grease, oil and deposits of iron ore fines or any other dust, filling scales powder of iron ore, rust in gunny bags supplied by Owner and lowering from roof to ground including scaffolding wherever required and cleaning of the surface with the application of solvents to remove the residual dust if approved by Engineer, including scaffolding all as per technical specifications.	MT	250.00 (Two Hundred Fifty)		
5	Material and labour complete for supply and application of paint according to the system given in Annexure, to the prepared surfaces of steel structures in Filter Plant building, approximately at (+) 21.10 Mtr. to (+) 30.60 Mtr. elevation/height or location as per details given in technical specification, including scaffolding wherever required and as per instructions of Engineer.	MT	250 (Two Hundred Fifty)		

TOTAL: _____

In words
(Rupeesonly)

NOTE:

- (i) Rates quoted against schedule items shall include all materials, labour, machinery expenses and hire charges, all taxes (except service tax), royalties, transport, maintenance incidents, enabling works etc, based on the conditions mentioned herein. Unless otherwise specified in the tender schedule the rates for all items will be deemed to include all leads, lifts and decent in the work.
- (ii). No escalation is admissible on any account whatsoever till the completion of the works.

Signature & Seal of the Bidder